

APPENDIX I: PROGRAM AREA OVERVIEW MATRICES

CBNMS FINAL MANAGEMENT PLAN

- A. Administration
- B. Education and Outreach
- C. Conservation Science
- D. Resource Protection

Appendix IA: Administration Overview Matrix

Administration Strategy	Action	Objective(s) Addressed	Complementary Strategies
	Action AD-1.1 Expand current main office space		
STRATEGY AD-1	Action AD-1.2 Satellite office in Bodega Bay	Objective 2 Identify appropriate staffing, budget levels and facility needs to	
Operations: Develop additional sanctuary facilities through various partnerships	Action AD-1.3 Intern/ researcher housing with PRNS	support implementation of the management plan.	
with both the public and private sector	Action AD-1.4 Expand vessel capabilities	Objective 3 Continue to build on partnerships, collaborative efforts and coordination with	
	Action AD-1.5 Complete facilities plan for visitor centers and outreach venues	other agencies, institutions and organizations.	
STRATEGY AD-2 Staffing: Basic staffing requirements must provide support for	Action AD-2.1 Minimum staffing requirements and fulfill staffing plan	Objective 2 Identify appropriate staffing, budget levels and facility needs to	
administration and the program areas	Action AD-2.2 Professional development for staff	support implementation of the management plan.	
STRATEGY AD-3 Partnerships: Develop partnerships to assist	Action AD-3.1 Develop MOU/ MOAs with regional marine labs to facilitate internship program	efforts and coordination with with	<u>CBNMS FMP</u> Partnerships with Community Groups,
implementation of the management plan	Action AD-3.2 Expand informal working relationship with NMFS and USGS		STRATEGY PC-1
	Action AD-4.1 Strengthen structure and function of sanctuary advisory council		CBNMS FMP Partnerships with Community Groups, STRATEGY PC-2
STRATEGY AD-4 Support maturing role of sanctuary advisory council in providing advice to sanctuary superintendent	Action AD-4.2 Develop format for assisting the building of CBNMS policies and procedures	Objective 3 Continue to build on partnerships, collaborative efforts and coordination with	
	Action AD-4.3 Provide resources and guidance to council to help engage the public	other agencies, institutions and organizations	MBNMS FMP Sanctuary Advisory Council, STRATEGY SAC-1
	Action AD-4.4 Convene issue specific working groups		

Administration Strategy	Action	Objective(s) Addressed	Complementary Strategies
	Action AD-5.1 Engage other agencies in reviewing each other's actions; work together to identify resource management issues		
STRATEGY AD-5 Interagency coordination: Formalize intra- and interagency efforts	Action AD-5.2 Formalize agreements with state/federal co-trustee managers regarding cooperative and integrated management of the sanctuary	Objective 3 Continue to build on partnerships, collaborative efforts and coordination with other agencies, institutions and organizations	
	Action AD-5.3 Formalize agreements for enforcement and emergency response plan		
	Action AD-6.1 Ensure sufficient enforcement patrols, including cross- deputization		
STRATEGY AD-6 Protected Resources Enforcement Plan: Develop enforcement plan which includes interpretive	Action AD-6.2 Use interpretive enforcement to inform and encourage voluntary compliance	Objective 1 Develop a structured administrative framework to continuously evaluate, maintain and expand, when necessary, administrative	CBNMS FMP Administration, Regulations and Permitting, STRATEGY AD-9
and legal enforcement	Action AD-6.3 Work regionally on addressing discharges in sanctuaries from cruise ships (see also Regional)	operations	
STRATEGY AD-7	Action AD-7.1Review and revise Emergency Response Plan	Objective 1 Develop a structured administrative	GFNMS FMP Resource Protection, Emergency Response, STRATEGY
Emergency Response: Develop Emergency Response Plan	Action AD-7.2 Train sanctuary staff on an ongoing basis to be prepared in an emergency	framework to continuously evaluate, maintain and expand, when necessary, administrative operations	RP-7 MBNMS FMP Operations and Administration, STRATEGY OA-4
STRATEGY AD-8 Regulations and Permitting: Evaluate the effectiveness of current sanctuary regulations and permitting	Action AD-8.1 Continuously evaluate the effectiveness of current sanctuary regulatory language and permitting authority Action AD-8.2 Maintain and enhance permit program	Objective 1 Develop a structured administrative framework to continuously evaluate, maintain and expand, when necessary, administrative operations	

Administration Strategy	Action	Objective(s) Addressed	Complementary Strategies
STRATEGY AD-9 New and	Action AD-9.1 Establish a framework for identifying and addressing new and emerging issues	Objective 1 Develop a structured administrative framework to continuously	GFNMS FMP Resource Protection, New and Emerging Issues, STRATEGY RP-1
Emerging Issues: Track existing, emerging, and potential future issues	Action AD-9.2 Establish a dynamic and up-to-date electronic system to inform one another of new and emerging issues	evaluate, maintain and expand, when necessary, administrative operations Objective 3 Continue to build on partnerships	MBNMS FMP Emerging Issues, STRATEGY EI-1, STRATEGY EI-2
STRATEGY AD-11 Planning and Evaluation: Conduct evaluations of activities and modify existing programs as needed	Action AD-11.1 Use site report card to measure overall management performance Action AD-11.2 Develop performance indicators for program areas Action AD-11.3 Manage for the future	Objective 1 Develop a structured administrative framework to continuously evaluate, maintain and expand, when necessary, administrative operations	
STRATEGY PC-1 Develop and maintain partnerships with research community (see also Research and AD-4)	Action PC-1.1 Collaborate with other research entities to share in-kind resources and services	Objective 1 Create partnerships to further research and monitoring to assist in answering resource management questions Objective 2 Create partnerships to establish a strong identity for the sanctuary within various interests in the community	CBNMS FMP Education, STRATEGY ED-7 and STRATEGY ED-8; Administration, STRATEGY AD-3
STRATEGY PC-2 Culture the advisory council as a link to the community	Action PC-2.1 Raise the profile of CBNMS by identifying the role of sanctuary advisory council (SAC) members to increase awareness of the sanctuary	Objective 2 Create partnerships to establish a strong identity for the sanctuary within various interests in the community Objective 4 Build stewardship to support and advocate for the needs of the sanctuary through creating partnerships	CBNMS FMP Administration, STRATEGY AD-4.
STRATEGY PC-4 Identify mechanisms to raise and manage additional sources of revenue	Action PC-4.1 As the need arises, CBNMS will develop partnerships to manage and generate additional sources of revenue	Objective 4 Build stewardship to support and advocate for the needs of the sanctuary through creating partnerships	

Appendix IB: Education and Outreach Overview Matrix

Education and Outreach Strategy	Action	Program Area Objective(s) Addressed	Complementary Strategies
STRATEGY ED-1 Targeted outreach efforts	Action ED-1.1 In coordination with GFNMS and MBNMS build community partnerships by engaging and informing the public about the CBNMS and greater CA Current Ecosystem and its neighboring sanctuaries	Objective 1 To take a hierarchical educational approach by developing awareness and building a knowledge base to changing behavior and build stewardship Objective 4 To develop programs that target diverse audiences including various multicultural, socioeconomic, age, and gender groups	GFNMS FMP Education and Outreach, STRATEGY ED-11; STRATEGY ED-13; MBNMS FMP Operations and Admin, STRATEGY OA-4; Marine Protected Areas, STRATEGY MPA-8; CBNMS FMP Partnerships with Community Groups, STRATEGY PC-2; Education and Outreach, STRATEGY ED-2, STRATEGY ED-3
STRATEGY ED-2 Utilize volunteers to communicate sanctuary messages	Action ED-2.1 Develop volunteer outreach program Action ED-2.2 Train volunteers and employees of existing organizations to deliver CBNMS educational messages through their programs	Objective 1 To take a hierarchical educational approach by developing awareness and building a knowledge base to changing behavior and build stewardship Objective 2 To increase communication and coordination among sanctuary education and outreach programs and partners	CBNMS FMP Education and Outreach, STRATEGY ED-1; MBNMS FMP Operations and Administration, STRATEGY OA-2, STRATEGY OA-4; Beach Closures, STRATEGY BC-2
STRATEGY ED-3 Leverage local and national media opportunities	Action ED-3.1 Communicate with the media	Objective 1 To take a hierarchical educational approach by developing awareness and building a knowledge base to changing behavior and build stewardship Objective 2 To increase communication and coordination among sanctuary education and outreach programs and partners	GFNMS FMP Education and Outreach, STRATGY ED-11; MBNMS FMP Operations and Administration STRATEGY OA-4; CBNMS FMP Education and Outreach, STRATEGY ED-1

Education and Outreach Strategy	Action	Program Area Objective(s) Addressed	Complementary Strategies
STRATEGY ED-4 Develop	Action ED-4.1 Develop portable products as outreach tools to educate a broader audience about the resources and activities of CBNMS and ocean conservation issues	Objective 1 To take a hierarchical educational approach by developing awareness and building a knowledge base to changing behavior and build stewardship	CBNMS FMP Education, STRATEGY ED-1, and STRATEGY ED-2
portable education products	Action ED-4.2 create curriculum and professional development opportunities for teachers	Objective 3 To develop programs to target content builders, user/impact groups, influencers, and decision makers	CBNMS FMP Education and Outreach, STRATEGY ED-1, STRATEGY ED-2, and STRATEGY ED-3
STRATEGY ED-5 Interpretive signage and exhibits	Action ED-5.1 Install interpretive signage	awareness and building a knowledge base to changing behavior and building stewardship Objective 2 To increase communication and coordination among sanctuary education and outreach programs and partners	CBNMS FMP Education and Outreach, STRATEGY ED-1; GFNMS FMP Education and Outreach, STRATEGY ED-13; MBNMS FMP Interpretive Facilities, STRATEGY IF-2
			CBNMS FMP Education and Outreach, STRATEGY ED-1, STRATEGY ED-2, and STRATEGY ED-3.
STRATEGY ED-6 Increase awareness and knowledge of CBNMS conservation science program by creating opportunities, programs, and materials for teachers and students.	Action ED-6.1 link conservation science projects into the classroom Action ED-6.2: Create programs that encourage marin engineering skills, remote sensing, GIS skills, monitoring skills, etc	Objective 1 To take a hierarchical educational approach by developing awareness and building a knowledge base to changing behavior and building stewardship.	CBNMS FMP Education and Outreach, STRATEGY ED-1; MBNMS FMP SIMoN, STRATEGY SI-3
STRATEGY ED-7 Adult Education programs	Action ED-7.1 offer field opportunities on natural history of CBNMS	Objective 1 To take a hierarchical educational approach by developing awareness and building a knowledge base to changing behavior and building stewardship	CBNMS FMP Education and Outreach, STRATEGY ED-1; Partnerships with Community Groups, STRATEGY PC-3
			CBNMS FMP Education and Outreach, STRATEGY ED-1

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Education and Outreach Strategy	Action	Program Area Objective(s) Addressed	Complementary Strategies
STRATEGY ED-8 Create an advisory group of education experts to advise on develoment of programs	Action ED-8.Create advisory group of education experts to advise on development of programs and materials	Objective 1 To take a hierarchical educational approach by developing awareness and building a knowledge base to changing behavior and build stewardship Objective 2 To increase communication and coordination among sanctuary education and outreach programs and partners	<u>CBNMS FMP</u> Education and Outreach, STRATEGY ED-1
STRATEGY ED-9 Develop multicultural education programming plan	Action ED-9.1 Identify communities and populations with growing non-english speaking populations	Objective 2 To increase communication and coordination among sanctuary education and outreach programs and partners	
STRATEGY PC-3 Use media opportunities to raise identity of the sanctuary	Action PC-3.1 Use media to raise interest of the sanctuary in the surrounding communities	Objective 2 Create partnerships to establish a strong identity for the sanctuary within various interests in the community	CBNMS FMP Education, STRATEGY ED-3; GFNMS FMP Education, STRATEGY ED-11 MBNMS FMP Operations and Administration, STRATEGY OA-4

Appendix IC: Conservation Science Overview Matrix

Conservation Science Strategy	Action	Program Area Objective(s) Addressed	Complementary Strategies
STRATEGY CS-1 Prepare an oceanographic climatology report	Action CS-1.1 Prepare an oceanographic climatology report	Objective 1 Characterize the habitats and communities of CBNMS, evaluate and synthesize characterization Objective 3 To recommend research and monitoring results for inclusion in CBNMS' outreach and education programs	
STRATEGY CS-2 Map and characterize CBNMS habitats	Action CS-2.1 Conduct sonar surveys to determine habitat types and their spatial extent	Objective 1 Characterize the habitats and communities of CBNMS, evaluate and synthesize characterization Objective 3 To recommend research and monitoring results for inclusion in CBNMS' outreach and education programs	CBNMS FMP Conservation Science, STRATEGY CS-1 and STRATEGY CS-3
STRATEGY CS-3 Characterize soft-bottom epifaunal communities of CBNMS	Action CS-3.1 Survey the surface biota and sediment characteristics of the soft-sediment portion of the shelf area of CBNMS	Objective 1 Characterize the habitats and communities of CBNMS, evaluate and synthesize characterization Objective 3 To recommend research and monitoring results for inclusion in CBNMS' outreach and education programs	CBNMS FMP Conservation Science, STRATEGY CS-1, STRATEGY CS-2, STRATEGY CS-4
STRATEGY CS-4 Characterize soft bottom infaunal communities of CBNMS	Action CS-4.1 Characterize the infaunal biota of the soft sediment portion of the shelf and slope of CBNMS	Objective 1 Characterize the habitats and communities of CBNMS, evaluate and synthesize characterization Objective 3 To recommend research and monitoring results for inclusion in CBNMS' outreach and education programs	CBNMS FMP Conservation Science, STRATEGY CS-2 and STRATEGY CS-3
STRATEGY CS-5 Collect, inventory and catalog new and previously unsorted Cordell Bank benthic invertebrate specimens	Action CS-5.1 Generate a voucher specimen database of the benthic invertebrates of Cordell Bank	Objective 1 Characterize the habitats and communities of CBNMS, evaluate and synthesize characterization	
	Action CS-5.2 Continue to collaborate with CAS on collection and identification of other Cordell Bank benthic invertebrates	Objective 3 To recommend research and monitoring results for inclusion in CBNMS' outreach and education programs	

Appendix IC: Conservation Science Overview Matrix CBNMS Final Management Plan

Conservation Science Strategy	Action	Program Area Objective(s) Addressed	Complementary Strategies
STRATEGY CS-6 Survey museum collections and literature for information about CBNMS and generate a verified species list	Action CS-6.1 Conduct a literature, specimen, and data search to compile existing knowledge about Cordell Bank	Objective 1 Characterize the habitats and communities of CBNMS, evaluate and synthesize characterization Objective 3 To recommend research and monitoring results for inclusion in CBNMS' outreach and education programs	
STRATEGY CS-7 Understand the function and variability of the pelagic ecosystem	Action CS-7.1 Assess quantitatively the distribution and abundance of marine birds and mammals relative to ocean conditions, seasons, and biological productivity	Objective 1 Characterize the habitats and communities of CBNMS, evaluate and synthesize characterization Objective 2 To determine monitoring objectives, identify indicators, and conduct a targeted monitoring program Objective 3 To recommend research and monitoring results for inclusion in CBNMS' outreach and education programs	
STRATEGY CS-8 Continue monitoring fish and invertebrate assemblages	Action CS-8.1 Perform submersible field surveys (1 to 3 year intervals) to monitor the distribution and abundance of fishes and invertebrates	Objective 1 Characterize the habitats and communities of CBNMS, evaluate and synthesize characterization Objective 2 To determine monitoring objectives, identify indicators, and conduct a targeted monitoring program Objective 3 To recommend research and monitoring results for inclusion in CBNMS' outreach and education programs	CBNMS FMP Conservation Science STRATEGY CS-1, STRATEGY CS-2, STRATEGY CS-3, STRATEGY CS-4, STRATEGY CS-5, and STRATEGY CS-6
STRATEGY CS-9 Manage and store data in easily accessible and secure formats and locations	Action CS-9.1 Store paper data sheets in two locations in sanctuary office	Objective 1 Characterize the habitats and communities of CBNMS, evaluate and synthesize characterization	
	Action CS-9.2 Electronic media will be copied and stored in sanctuary office	Objective 2 To determine monitoring objectives, identify indicators, and conduct a targeted monitoring program	

Appendix IC: Conservation Science Overview Matrix CBNMS Final Management Plan

Conservation Science Strategy	Action	Program Area Objective(s) Addressed	Complementary Strategies
	Action CS-9.3 Data obtained from laboratory analysis of video will be stored in a relational database		
STRATEGY CS-10: Assess the role of Cordell Bank in the supply and receipt of fish larvae within the regional marine ecosystem by linking population genetics and oceanography.	Activity 10.1 Determine the genetic make-up of adult, juvenile and larval populations of fish with pelagic larval stages within the Cordell Bank region relative to regional populations to understand levels of mixing and retention of early life history stages.	Objective 1 Characterize the habitats and communities of CBNMS, evaluate and synthesize characterization	
	Activity 10.2 Examine larval dispersal through simulations of coupled biophysical models.	Objective 1 Characterize the habitats and communities of CBNMS, evaluate and synthesize characterization	

Appendix ID: Resource Protection Overview Matrix

Resource Protection Strategy	Action	Program Area Objective(s) Addressed	Complementary Strategies	
STRATEGY EP-1 Sanctuary representation at PFMC and FGC meetings	Action EP-1.1 Select a west coast sanctuaries' representative to attend PFMC and FGC meetings	Objective 1: Establish a working relationship with state and federal fisheries management agencies Objective 3: Support adaptive management plans that promote ecosystem health	GFNMS FMP Fishing Activities, STRATEGY FA-6; MBNMS FMP Fishing Related Education and Research, STRATEGY FER-1	
STRATEGY EP-2 Track human-use activities in and around sanctuary waters	Action EP-2.1 Establish standing Ecosystem Protection Working group of the sanctuary advisory council	Objective 2: Track and evaluate existing, new, and emerging issues for their potential impacts on sanctuary	and STRATEGY AD-10; r MBNMS FMP Benthic	
around sanctuary waters	Action EP-2.2 Develop tracking process	resources		
STRATEGY EP-3 Evaluate	Action EP-3.1 Develop definition for "compatible use"	Objective 2: Track and evaluate existing, new, and emerging issues for their potential impacts on sanctuary resources	CBNMS FMP Regulations and Permitting, Administration, STRATEGY AD-9; and New and Emerging Issues,	
STRATEGY EP-3 Evaluate impacts of human-use activities on sanctuary resources	Action EP-3.2 Develop "compatibility index"	Objective 3: Support adaptive management plans that promote ecosystem health Objective 4: To develop a definition of "compatible use" for activities that complement the sanctuary's primary objective of resource protection	STRATEGY AD-10; GFNMS FMP Fishing Activities, STRATEGY FA-3; MBNMS FMP Benthic Habitats, STRATEGY BH- 2; STRATEGY FER-3	
STRATEGY EP-4 Address negative impacts from human-use activities using policy or management	Action EP-4.1 If significant negative impacts detected, establish stakeholder group to evaluate	Objective 2: Track and evaluate existing, new, and emerging issues for their potential impacts on sanctuary	CBNMS FMP Regulations and Permitting, Administration, STRATEGY AD-9; and New and Emerging Issues, STRATEGY AD-10 GFNMS FMP Fishing	
actions	Action EP-4.2 Develop policy response based on relative level of impact as determined by compatibility index	resources	Activities, STRATEGY FA-4; MBNMS FMP Benthic Habitats, STRATEGY BH- 2	

Appendix ID: Resource Protection Overview Matrix CBNMS Final Management Plan

Resource Protection Strategy	Action	Program Area Objective(s) Addressed	Complementary Strategies
STRATEGY EP-5 Address impacts from krill harvesting	Action EP-5.1 Work with MBNMS and GFNMS to support NMFS and PFMC actions to prohibit the commercial harvest of krill.	Objective 2: Track and evaluate existing, new, and emerging issues for their potential impacts on sanctuary resources	
STRATEGY EP-6 Profile	Action EP-6.1 Increase numbers of observers on fishing vessels in CBNMS	Objective 3: Support adaptive	
fishing activities and communities	Action EP-6.2 Profile historic and evolution of fishing activities in and adjacent to the sanctuary	management plans that promote ecosystem health	
STRATEGY PC-3 Use media opportunities to raise identity of the sanctuary	Action PC-3.1 Use media opportunities to promote sanctuary research programs and raise identity of sanctuary	Objective 2: Create partnerships to establish a strong identity for the sanctuary within various interest in the community	<u>CBNMS FMP</u> Education, STRATEGY ED-3
STRATEGY AD-1 Develop a framework for identifying and analyzing boundary options	Action AD-1.1 Develop a framework for identifying and analyzing boundary options	To develop and implement an analytical process designed to evaluate boundary alternatives relative to CBNMS using the best available information and decision making tools	CBNMS FMP Ecosystem Protection, STRATEGY EP-4 AND EP-6; Research and Monitoring, STRATEGY RE-1, STRATEGY RE-2, AND STRATEGY RE-7



APPENDIX II: ECOSYSTEM PROTECTION IMPLEMENTATION PLANS

CBNMS FINAL MANAGEMENT PLAN

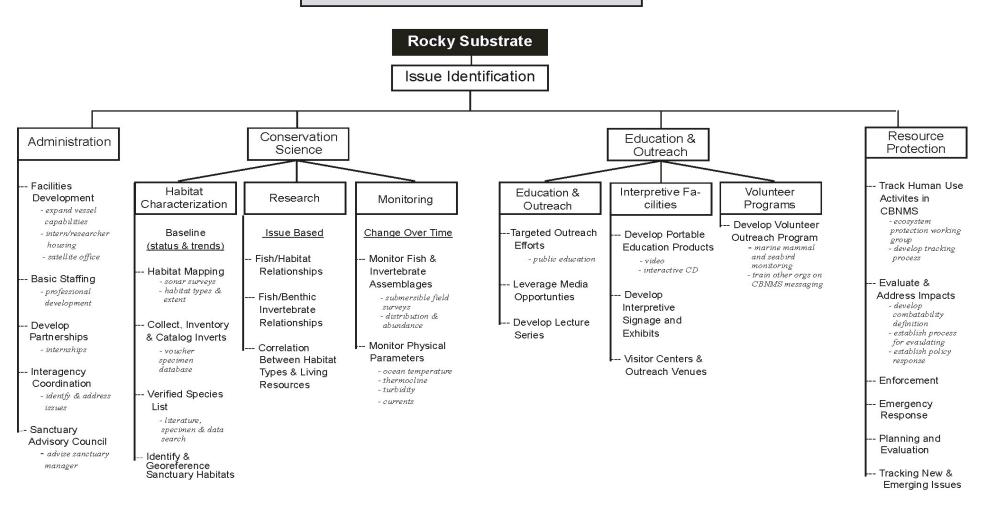
- A. Introduction
- B. Rocky Substrate
- C. Pelagic (Open Ocean)
- D. Soft Bottom Shelf and Slope

Appendix IIA: Introduction

The following Ecosystem Protection Implementation Plan presents the strategies from the Management Plan organized into three key habitats of the sanctuary: rocky substrate, pelagic (open ocean), and soft bottom shelf and slope. The organizational chart prioritizes the implementation of the strategies to ensure that the sanctuary adequately addresses all resource management issues within each key habitat. This chart allows sanctuary staff to identify opportunities to collaborate between program areas focused around priority sanctuary habitats. These charts are organized by the sanctuary's programmatic organizational structure, within the context of the three priority sanctuary habitats. The sanctuary manager will oversee each habitat team to ensure coordination across program areas and protection for each habitat. The purpose of the ecosystem protection implementation plan for Cordell Bank Sanctuary is not necessarily to mitigate or improve the habitats, but rather to research and monitor a rather pristine environment.

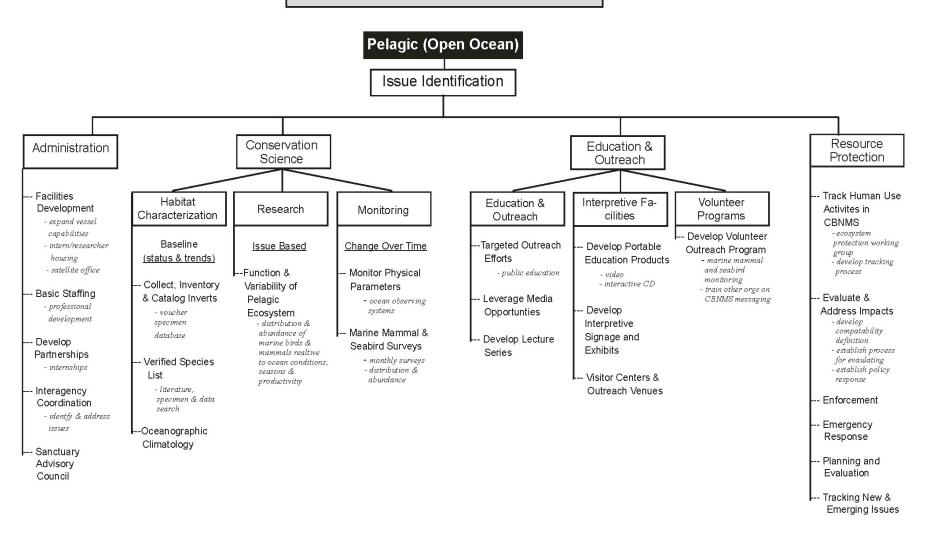
Appendix IIB: Rocky Substrate

CBNMS ECOSYSTEM PROTECTION IMPLEMENTATION PLAN



Appendix IIC: Pelagic (Open Ocean)

CBNMS ECOSYSTEM PROTECTION IMPLEMENTATION PLAN



Appendix IID: Soft Bottom Shelf and Slope

Communities

CBNMS ECOSYSTEM PROTECTION IMPLEMENTATION PLAN **Soft Bottom Shelf & Slope** Issue Identification Conservation Resource Administration Education & Protection Science Outreach Facilities - Track Human Use Interpretive Fa-Habitat Volunteer Education & Development Research Monitoring Activites in Characterization Outreach cilities Programs - expand vessel **CBNMS** capabilities - ecosystem protection working Baseline Change Over Time -Targeted Outreach - intern/researcher Develop Portable Issue Based Develop Volunteer group - develop tracking Efforts housing (status & trends) Education Products Outreach Program - satellite office Monitor Fish & - public education - train other orgs on process - Pollutant Studies - video CBNMS messaging Invertebrate - interactive CD Habitat Mapping Basic Staffing Evaluate & Assemblages Leverage Media - professional - habitat types & Develop Opportunties Address Impacts - submersible field development extent Interpretive - develop surveys combatability - distribution & Signage and Develop Lecture definition Develop Collect, Inventory abundance Exhibits - establish process Series Partnerships - habitat association & Catalog Inverts for evaulating - internships establish policy - voucher - Visitor Centers & response specimen Outreach Venues Interagency database Enforcement Coordination - identfy & address Verified Species Emergency List Response - literature, Sanctuary specimen & data Planning and Advisory search Evaluation Council Soft Bottom Tracking New & Epifauna Emerging Issues Communities Soft Bottom Infaunal



APPENDIX III: ADDITIONAL APPENDICES

CBNMS FINAL MANAGEMENT PLAN

- A. Jurisdictional Authorities
- B. Glossary
- C. Acronyms
- D. National Marine Sanctuaries Act
- E. Species List

Appendix IIIA: Jurisdictional Authorities

CBNMS is located entirely beyond the three-mile territorial sea and is therefore under the jurisdiction of federal statutes with the exception that the California Department of Fish and Game (CDFG) exercises jurisdiction over certain fishing activities in Cordell Bank waters together with the National Marine Fisheries Service (NMFS). The other federal agencies with existing primary responsibilities in the area of Cordell Bank are the U.S. Fish and Wildlife Service (FWS) and the Minerals Management Service (MMS) of the Department of the Interior, and the U.S. Coast Guard (USCG) of the Department of Transportation. This section will briefly review the responsibilities of these agencies.

FEDERAL AUTHORITIES

National Marine Fisheries Service (NMFS)

The NMFS is responsible for enforcing the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), the Marine Mammal Protection Act (MMPA), and the Endangered Species Act (ESA). Under the MSFCMA, NMFS approves and enforces fishery management plans (FMP) prepared by regional fishery management councils. NMFS relies heavily on CDFG and USCG for enforcement operations both within and outside the three-mile territorial sea. Cordell Bank fish populations affected by FMP regulations are lingcod, rockfish, and salmon.

The NMFS shares responsibility with the FWS for implementation of the Marine Mammal Protection Act and the Endangered Species Act (see FWS entry below). NMFS is responsible for protecting cetaceans and pinnipeds and their habitats under both laws, as well as sea turtles and fish that are listed as threatened or endangered.

United States Fish and Wildlife Service (FWS)

Within the waters of CBNMS, the FWS is responsible for protecting all marine mammal species other than cetaceans, and pinnipeds under the MMPA, and for protecting endangered or threatened bird species under the ESA. The Brown Pelican and Short-tailed Albatross are two bird species listed as endangered which forage in the CBNMS.

United States Coast Guard (USCG)

Among its numerous law enforcement rwsponsibilities, the USCG is charged with enforcing regulations under the Clean Water Act (CWA) to prevent pollution caused by discharges from vessels of oil, hazardous substances, or other pollutants.

The USCG has established a Vessel Traffic Separation Scheme (VTSS) according to the Ports and Waterways Safety Act (PWSA) for ship traffic approaching San Francisco Bay from the north and departing in that direction, thus passing through CBNMS. It consists of two mile-wide inbound and outbound vessel traffic lanes with a separation zone between them.

The USCG is also responsible for enforcing fishing regulations as noted above (under NMFS) and maintaining boater safety, and coordinating search and rescue operations. Numerous regulations have been promulgated relating to vessel design, construction, and operation designed to minimize the likelihood of accidents and to reduce vessel source pollution.

Minerals Management Service (MMS)

The MMS is responsible for managing offshore oil and gas exploration and development operations in accordance with the provisions of the Outer Continental Shelf Lands Act. The Energy Policy Act of 2005, Section 388, granted MMS new authority to regulate alternative energy and alternate use on the OCS. Section 388 authority does not apply to areas within National Marine Sanctuaries.

The Outer Continental Shelf Lands Act establishes federal jurisdiction over the natural resources of the Outer Continental Shelf (OCS) beyond three nautical miles. The MMS has primary responsibility for managing OCS mineral exploration and development.

Environmental Protection Agency (EPA)

The EPA has regulatory responsibilities with regard to ocean dumping. Title I of the Marine Protection, Research and Sanctuaries Act prohibits the transportation of any materials from the United States for the purpose of dumping them into the territorial sea, the contiguous zone, and the ocean beyond without a permit from EPA.

STATE AUTHORITIES

California Department of Fish and Game (CDFG)

The CDFG, under the Fish and Game Code (and Chapter 14 of the Administrative Code), regulates and manages a wide variety of activities affecting the living marine resources found in the territorial sea and in the 200-mile wide exclusive economic zone. The application of this regulatory activity in Cordell Bank waters consists of enforcement of a California law enacted in 1985 that bans gill-net fishing north of a line extending 245° magnetic from Point Reyes. Cordell Bank lies well north of this line. The CDFG also enforces federal regulations established under the MSFCMA.

Appendix IIIB: Glossary of Terms

Action plan: A major section of a management plan containing related strategies and activities designed to address a specific issue or function (NOAA, *National Marine Sanctuary Management Plan Handbook*, 3rd edition, 2002).

Activity: Specific actions that will be taken to carry out a strategy (NOAA, *National Marine Sanctuary Management Plan Handbook*, 3rd edition, 2002).

Bathymetry: Water depth measurement information used to produce depth-contoured charts.

Benthic: The region of the ocean consisting of the seabed and the organisms that live on or in it.

Benthic communities: Bottom-dwelling plants and animals.

Biodiversity: The variability among living organisms from all sources, including terrestrial, marine, and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.

Continental shelf: A generally shallow, flat submerged portion of a continent, extending to the point of step descent to the ocean floor.

Critical habitat: The specific areas within the geographical area occupied by a threatened or endangered species on which are found those physical or biological features essential to the conservation of the species, and which may require special management considerations or protection.

Demersal: Fishes and other aquatic organisms that live near the bottom of the water column.

Depleted: A species is termed depleted when it falls below its optimum sustainable population.

Designation document: A portion of the regulations for a given sanctuary that spells out the terms of its designation, including boundaries, regulations, and those activities potentially subject to future regulation.

Desired outcome: A succinct and concise statement that articulates a desired future for a sanctuary relative to a specific problem statement (NOAA, *National Marine Sanctuary Management Plan Handbook*, 3rd edition, 2002).

Ecology: The science of the relationships between organisms and their environments.

Ecosystem: The sum total of all living and nonliving components of a particular area that interact and exchange materials with each other; sometimes defined as the ecological community of organisms plus the environment with which they interact. Energy flow and nutrient cycling are regulated within a particular ecosystem and are studied as indicators of its overall health.

Endangered species: Any species that is in danger of extinction throughout all or a significant portion of its range.

Epifauna: Animals that live on the ocean bottom, either attached or moving freely over it.

Food chain: A succession of organisms in a community that constitutes a feeding chain in which food energy is transferred from one organism to another as each consumes a lower member and in turn is preyed upon by a higher member.

Indigenous: Living or occurring naturally in a specific area or environment.

Infaunal: Organisms that live buried in sediments, including a variety of polychaetes, burrowing crustaceans, and mollusks.

Infrastructure: Basic installations and facilities, such as roads, power plants, transportation, and communication systems.

Invertebrate: An animal lacking a backbone or spinal column.

Isobath: An imaginary line or one drawn on a map connecting all points of equal depth below the surface of a body of water.

Marine protected area: Any area of the marine environment that has been reserved by federal, state, territorial, tribal, or local laws or regulations to provide lasting protection for part or all of the natural and cultural resources therein. (Executive Order 13158 on Marine Protected Areas). Under this broad definition, a wide variety of sites including fishery management zones, national parks, national marine sanctuaries, national estuarine research reserves, state conservation areas, critical habitats, and state reserves could be considered as marine protected areas.

Marine reserve: A kind of marine protected area generally agreed to have strict regulations regarding the extraction of resources.

Mollusks: Any of various members of the phylum Mollusca, largely marine invertebrates, including the edible shellfish and some 100,000 other species.

Multibeam: A type of sonar that has multiple beams to record water depth.

Organism: Plant or animal.

Pathogens: Any agent, most commonly a micro-organism, capable of causing a disease.

Pelagic: Of, relating to, or living in open seas or oceans rather than waters adjacent to land or inland waters.

Planktonic: Organisms dependent on water movement and currents as their means of transportation, including phytoplankton, zooplankton, and ichthyoplankton.

Program/Issue Statements: A one or two sentence articulation of the specific components of an issue (NOAA, *National Marine Sanctuary Management Plan Handbook*, 3rd edition, 2002).

Salinity: The relative concentration of salts, usually sodium chloride, in a given water sample. It is usually expressed in terms of the number of parts per thousand (ppt) or parts per million (ppm) of chlorine (Cl). As a reference, the salinity of seawater is approximately 35 ppt.

Side-scan sonar: A type of sonar that gathers sound reflections at oblique angles to the sensor.

Socioeconomic: Being both social and economic.

Strategy: The means by which a particular desired outcome can be achieved (NOAA, *National Marine Sanctuary Management Plan Handbook*, 3rd edition, 2002).

Substrate: A surface on which a plant or animal grows or is attached.

Threatened Species: Any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

Trawling: To fish using a trawl, a large tapered and flattened or conical net towed along the sea bottom.

Trolling: To fish by running a baited line behind a slowly moving boat.

Trophic: A description related to feeding; it often refers to a feeding level in a food chain.

Trophic level: One of a succession of steps in the movement of energy and matter through a food chain in an ecosystem.

Turbidity: The extent to which there are suspended or stirred up particles or sediments, as in the water column.

Appendix IIIC: Acronyms

ACCEO Alliance for California Current Ecosystem Observation

ACP Area Contingency Plan (USCG)

ACR Audubon Canyon Ranch
ACS American Cetacean Society
AIS Automated Identification System

AOP Annual Operating Plan

APPS U.S. Act to Prevent Pollution from Ships ATOC Acoustic Thermometry of Ocean Climate

Beach COMBERS Beach Coastal Ocean/Marine Bird Education Research Surveys

BML Bodega Marine Laboratory
BMP best management practices

CalCOFI California Cooperative Oceanic Fisheries Investigations

CAS California Academy of Sciences

CBNMS Cordell Bank National Marine Sanctuary
CDFG California Department of Fish and Game
CenCOOS Central California Ocean Observing Systems

CFR Code of Federal Regulations

CIMT Center for Integrated Marine Technology
CINMS Channel Islands National Marine Sanctuary
CMAR Coastal Maritime Archaeology Resources
COASST Coastal Observation And Seabird Survey Team
CODAR Coastal Ocean Dynamics Applications Radar

CSC Coastal Services Center

CSLC California State Lands Commission
CSUMB California State University Monterey Bay

CWA U.S. Clean Water Act

DARRF Damage Assessment and Restoration Evolving Fund

FEIS Final Environmental Impact Statement
DFG California Department of Fish and Game

FMP Final Management Plan

DOC United States Department of Commerce DOI United States Department of the Interior

EDS Ecosystem Dynamics Study

EECOM Environmental Education Council of Marin

EEZ U.S. Exclusive Economic Zone

EFH essential fish habitat

EIR Environmental Impact Report

FEIS Final Environmental Impact Statement EPA U.S. Environmental Protection Agency

ESA Endangered Species Act

FEIS/MP Final Environmental Impact Statement and Management Plan

FGBNMS Flower Garden Banks National Marine Sanctuary

FGC Fish and Game Commission
FGDC Federal Geospatial Data Center
FMP Fishery Management Plan

FMSA Farallones Marine Sanctuary Association FWCPA Federal Water Pollution Control Act

Appendix IIIC: Acronyms

CBNMS Final Management Plan

GCEL General Council Enforcement Litigation

GCOS General Council Ocean Service

GFNMS Gulf of the Farallones National Marine Sanctuary

GGNRA Golden Gate National Recreation Area

GIS geographic information systems
GPS global positioning system

GRNMS Gray's Reef National Marine Sanctuary

GSA General Services Administration

HAB harmful algal bloom

HAZMAT Hazardous Materials Response Division

HIHWNMS Hawaiian Islands Humpback Whale National Marine Sanctuary

HMB Half Moon Bay Regional Office IACC Interagency Coordinating Committee

ICES International Council for Exploration of the Sea

ICS Incident Command System IFQ individual fishing quota

IGERT Integrative Graduate Education and Research Traineeship Program

IMOInternational Maritime OrganizationIOOSIntegrated Ocean Observing SystemITOindividual transferable quota

IUCN International Union for Conservation of Nature and Natural Resources

JASON Foundation for Education Project

JMPR Joint Management Plan Review JRAP Joint Research Advisory Panel LCV Large Commercial Vessels

LiMPETS Long-term Monitoring Program and Experiential Training for Students

MAC Maritime Archeological Center

MARE Marine Activities, Resources, and Education
MARINE Multi-Agency Rocky Intertidal Network (NOAA)

MARPOL International Convention for the Prevention of Pollution from Ships

MATE Marine Advanced Technology Education (Center)
MBARI Monterey Bay Aquarium Research Institute
MBNMS Monterey Bay National Marine Sanctuary

MBNMSF Monterey Bay National Marine Sanctuary Foundation (MBSF)

MBTA Migratory Bird Treaty Act

MCBI Marine Conservation Biology Institute

MERITO Multicultural Education for Resource Issues Threatening Oceans

MHP Marine Heritage Program (NMSP)
MLML Moss Landing Marine Laboratories

MLPA Marine Life Protection Act
MMPA Marine Mammal Protection Act
MMS Minerals Management Service
MOA memorandum of agreement
MOU memorandum of understanding

MPA marine protected area MSD marine sanitation device

MSFCMA Magnuson-Stevens Fishery Conservation and Management Act NANPCA Nonindigenous Aquatic Nuisance Prevention and Control Act

NAS Nautical Archaeology Society

NCCOS The National Centers for Coastal Ocean Science

NDBC National Data Buoy Center

NEPA National Environmental Policy Act

NERRS National Estuarine Research Reserve System

NESDIS National Environmental Satellite Data Information Service

NGO non-governmental organization NHPA National Historic Preservation Act NISA National Invasive Species Act of 1996

NISAC Non-native Invasive Species Advisory Committee

NM nautical mile

NMA Northern Management Area
NMFS National Marine Fisheries Service
NMSA National Marine Sanctuaries Act
NMSF National Marine Sanctuaries Foundation
NMSP National Marine Sanctuary Program
NOAA OLE NOAA Office of Law Enforcement

NOAA National Oceanic and Atmospheric Administration

NODC National Oceanographic Data Center

NOS National Ocean Service

NPDES National Pollutant Discharge Elimination System

NPR National Public Radio NPS National Park Service

NRDA National Resource Damage Assessment and Restoration

NURP National Undersea Research Program (NOAA)

NWFSC North West Fisheries Science Center

NWS National Weather Service

OCNMS Olympic Coast National Marine Sanctuary

OCRM Office of Coastal Resource Management (NOAA)

OCS Outer Continental Shelf
OES Office of Emergency Services
OMS Office of Marine Sanctuaries
OPA Oil Spill Prevention Act of 1990
ORR Office of Response and Restoration

OSPR (Office of) Oil Spill Prevention and Response (CDFG)

OSRO Oil Spill Response Organization

PCFFA Pacific Coast Federation of Fishermen's Associations

PCLC Pacific Coast Learning Center
PFMC Pacific Fishery Management Council

PISCO Partnership for Interdisciplinary Studies of Coastal Oceans
PRBO PRBO Conservation Science (Point Reves Bird Observatory)

PRNS Point Reyes National Seashore

PRNSA Point Reyes National Seashore Association

PSA public service announcement

PSMFC Pacific States Marine Fisheries Commission

PWSA Ports and Waterways Safety Act

RAP Research Advisory Panel ROV remotely operated vehicle RRP Regional Response Plan

RUST Resources and Under Sea Threats (NMSP database system)

SAC Sanctuary Advisory Council

SBNMS Stellwagen Bank National Marine Sanctuary

Appendix IIIC: Acronyms

CBNMS Final Management Plan

SCCWRP Southern California Coastal Water Research Project Authority

SCRP Submerged Cultural Resources Program (NMSP)
SEAMAP Southeast Area Monitoring and Assessment Program

SeaWif Sea-viewing Wide Field of Vision

SERC Smithsonian Environmental Research Center

SFNERR San Francisco National Estuarine Research Reserve

SFSU San Francisco State University

SHIELDS Sanctuaries Hazardous Incident Emergency Logistics Database System

SHPO California State Historic Preservation Office

SIMON Sanctuary Integrated Monitoring Network (MBNMS)

SRP Shipwreck Reconnaissance Program

SWiM System Wide Monitoring Program (NMSP)

SWMEA Southwest Marine and Aquatic Educator's Association

TBNMS Thunder Bay National Marine Sanctuary

Team OCEAN TEAM Ocean Conservation Education Action Network (NOAA)

TMMC The Marine Mammal Center
UCD University of California Davis
UCSC University of California Santa Cruz

USCG United States Coast Guard

USFWS United States Fish and Wildlife Service

USGS United States Geological Survey

VTS Vessel Traffic System

VTSS Vessel Traffic Separation Schemes WQPP Water Quality Protection Program

.

Appendix IIID: National Marine Sanctuaries Act

16 U.S.C. 1431 ET SEQ., as amended by Public Law 106-513

Sec. 301. FINDINGS, PURPOSES, AND POLICIES; ESTABLISHMENT OF SYSTEM

- (a) FINDINGS.--The Congress finds that--
- (1) this Nation historically has recognized the importance of protecting special areas of its public domain, but these efforts have been directed almost exclusively to land areas above the highwater mark;
- (2) certain areas of the marine environment possess conservation, recreational, ecological, historical, scientific, educational, cultural, archeological, or aesthetic qualities which give them special national, and in some instances, international, significance;
- (3) while the need to control the effects of particular activities has led to enactment of resource-specific legislation, these laws cannot in all cases provide a coordinated and comprehensive approach to the conservation and management of special areas of the marine environment; and
- (4) a Federal program which establishes areas of the marine environment which have special conservation, recreational, ecological, historical, cultural, archeological, scientific, educational, or aesthetic qualities as national marine sanctuaries managed as the National Marine Sanctuary System will-
- (A) improve the conservation, understanding, management, and wise and sustainable use of marine resources;
- (B) enhance public awareness, understanding, and appreciation of the marine environment; and
- (C) maintain for future generations the habitat, and ecological services, of the natural assemblage of living resources that inhabit these areas.
- (b) PURPOSES AND POLICIES.--The purposes and policies of this title are--
- (1) to identify and designate as national marine sanctuaries areas of the marine environment which are of special national significance and to manage these areas as the National Marine Sanctuary System;
- (2) to provide authority for comprehensive and coordinated conservation and management of these marine areas, and activities affecting them, in a manner which complements existing regulatory authorities;

- (3) to maintain the natural biological communities in the national marine sanctuaries, and to protect, and, where appropriate, restore and enhance natural habitats, populations, and ecological processes;
- (4) to enhance public awareness, understanding, appreciation, and wise and sustainable use of the marine environment, and the natural, historical, cultural, and archeological resources of the National Marine Sanctuary System;
- (5) to support, promote, and coordinate scientific research on, and long-term monitoring of, the resources of these marine areas;
- (6) to facilitate to the extent compatible with the primary objective of resource protection, all public and private uses of the resources of these marine areas not prohibited pursuant to other authorities;
- (7) to develop and implement coordinated plans for the protection and management of these areas with appropriate Federal agencies, State and local governments, Native American tribes and organizations, international organizations, and other public and private interests concerned with the continuing health and resilience of these marine areas;
- (8) to create models of, and incentives for, ways to conserve and manage these areas, including the application of innovative management techniques; and
- (9) to cooperate with global programs encouraging conservation of marine resources.
- (c) ESTABLISHMENT OF SYSTEM.-There is established the National Marine Sanctuary System, which shall consist of national marine sanctuaries designated by the Secretary in accordance with this title.

Sec. 302. DEFINITIONS

As used in this title, the term--

- (1) "management plan" means the plan described in section 304(a)(1)(C)(v);
- (2) "Magnuson-Stevens Act" means the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.);
- (3) "marine environment" means those areas of coastal and ocean waters, the Great Lakes and their connecting waters, and submerged lands over which the United States exercises jurisdiction, including the exclusive economic zone, consistent with international law;
- (4) "Secretary" means the Secretary of Commerce;
- (5) "State" means each of the several States, the District of Columbia, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, American Samoa, the Virgin Islands, Guam, and any other commonwealth, territory, or possession of the United States;

- (6) "damages" includes--
- (A) compensation for--
- (i)(I) the cost of replacing, restoring, or acquiring the equivalent of a sanctuary resource; and (II) the value of the lost use of a sanctuary resource pending its restoration or replacement or the acquisition of an equivalent sanctuary resource; or
- (ii) the value of a sanctuary resource if the sanctuary resource cannot be restored or replaced or if the equivalent of such resource cannot be acquired;
- (B) the cost of damage assessments under section 312(b)(2);
- (C) the reasonable cost of monitoring appropriate to the injured, restored, or replaced resources;
- (D) the cost of curation and conservation of archeological, historical, and cultural sanctuary resources; and
- (E) the cost of enforcement actions undertaken by the Secretary in response to the destruction or loss of, or injury to, a sanctuary resource;
- (7) "response costs" means the costs of actions taken or authorized by the Secretary to minimize destruction or loss of, or injury to, sanctuary resources, or to minimize the imminent risks of such destruction, loss, or injury, including costs related to seizure forfeiture, storage, or disposal arising from liability under section 312;
- (8) "sanctuary resource" means any living or nonliving resource of a national marine sanctuary that contributes to the conservation, recreational, ecological, historical, educational, cultural, archeological, scientific, or aesthetic value of the sanctuary;
- (9) "exclusive economic zone" means the exclusive economic zone as defined in the Magnuson-Stevens Act; and
- (10) 'System' means the National Marine Sanctuary System established by section 301.

Sec. 303. SANCTUARY DESIGNATION STANDARDS

- (a) STANDARDS.--The Secretary may designate any discrete area of the marine environment as a national marine sanctuary and promulgate regulations implementing the designation if the Secretary determines that--
- (1) the designation will fulfill the purposes and policies of this title;
- (2) the area is of special national significance due to-
- (A) its conservation, recreational, ecological, historical, scientific, cultural, archeological, educational, or aesthetic qualities;

- (B) the communities of living marine resources it harbors; or
- (C) its resource or human-use values;
- (3) existing State and Federal authorities are inadequate or should be supplemented to ensure coordinated and comprehensive conservation and management of the area, including resource protection, scientific research, and public education;
- (4) designation of the area as a national marine sanctuary will facilitate the objectives in subparagraph (3); and
- (5) the area is of a size and nature that will permit comprehensive and coordinated conservation and management.
- (b) FACTORS AND CONSULTATIONS REQUIRED IN MAKING DETERMINATIONS AND FINDINGS.--
- (1) Factors.--For purposes of determining if an area of the marine environment meets the standards set forth in subsection (a), the Secretary shall consider--
- (A) the area's natural resource and ecological qualities, including its contribution to biological productivity, maintenance of ecosystem structure, maintenance of ecologically or commercially important or threatened species or species assemblages, maintenance of critical habitat of endangered species, and the biogeographic representation of the site;
- (B) the area's historical, cultural, archaeological, or paleontological significance;
- (C) the present and potential uses of the area that depend on maintenance of the area's resources, including commercial and recreational fishing, subsistence uses other than commercial and recreational activities, and research and education;
- (D) the present and potential activities that may adversely affect the factors identified in subparagraphs (A), (B), (C);
- (E) the existing State and Federal regulatory and management authorities applicable to the area and the adequacy of those authorities to fulfill the purposes and policies of this title;
- (F) the manageability of the area, including such factors as its size, its ability to be identified as a discrete ecological unit with definable boundaries, its accessibility, and its suitability for monitoring and enforcement activities;
- (G) the public benefits to be derived from sanctuary status, with emphasis on the benefits of long-term protection of nationally significant resources, vital habitats, and resources which generate tourism;
- (H) the negative impacts produced by management restrictions on income-generating activities such as living and nonliving resources development;

- (I) the socioeconomic effects of sanctuary designation;
- (J) the area's scientific value and value for monitoring the resources and natural processes that occur there;
- (K) the feasibility, where appropriate, of employing innovative management approaches to protect sanctuary resources or to manage compatible uses; and
- (L) the value of the area as an addition to the System.
- (2) Consultation.--In making determinations and findings, the Secretary shall consult with--
- (A) the Committee on Resources of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate;
- (B) the Secretaries of State, Defense, Transportation, and the Interior, the Administrator, and the heads of other interested Federal agencies;
- (C) the responsible officials or relevant agency heads of the appropriate State and local government entities, including coastal zone management agencies, that will or are likely to be affected by the establishment of the area as a national marine sanctuary;
- (D) the appropriate officials of any Regional Fishery Management Council established by section 302 of the Magnuson-Stevens Act (16 U.S.C. 1852) that may be affected by the proposed designation; and
- (E) other interested persons.

Sec. 304. PROCEDURES FOR DESIGNATION AND IMPLEMENTATION

- (a) SANCTUARY PROPOSAL.--
- (1) Notice.--In proposing to designate a national marine sanctuary, the Secretary shall--
- (A) issue, in the Federal Register, a notice of the proposal, proposed regulations that may be necessary and reasonable to implement the proposal, and a summary of the management plan;
- (B) provide notice of the proposal in newspapers of general circulation or electronic media in the communities that may be affected by the proposal; and
- (C) no later than the day on which the notice required under subparagraph (A) is submitted to Office of the Federal Register, submit a copy of that notice and the sanctuary designation documents prepared pursuant to section 304(a)(2), including an executive summary, to the Committee on Resources of the House of Representatives, the Committee on Commerce, Science, and Transportation of the Senate, and the Governor of each State in which any part of the proposed sanctuary would be located.

- (2) Sanctuary Designation Documents.--The Secretary shall prepare and make available to the public sanctuary designation documents on the proposal that include the following:
- (A) A environmental impact statement pursuant to the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).
- (B) A resource assessment that documents--
- (i) present and potential uses of the area, including commercial and recreational fishing, research and education, minerals and energy development, subsistence uses, and other commercial, governmental, or recreational uses;
- (ii) after consultation with the Secretary of the Interior, any commercial, governmental, or recreational resource uses in the areas that are subject to the primary jurisdiction of the Department of the Interior; and
- (iii) information prepared in consultation with the Secretary of Defense, the Secretary of Energy, and the Administrator of the Environmental Protection Agency, on any past, present, or proposed future disposal or discharge of materials in the vicinity of the proposed sanctuary. Public disclosure by the Secretary of such information shall be consistent with national security regulations.
- (C) A management plan for the proposed national marine sanctuary that includes the following:
- (i) The terms of the proposed designation.
- (ii) Proposed mechanisms to coordinate existing regulatory and management authorities within the area.
- (iii) The proposed goals and objectives, management responsibilities, resource studies, and appropriate strategies for managing sanctuary resources of the proposed sanctuary, including interpretation and education, innovative management strategies, research, monitoring and assessment, resource protection, restoration, enforcement, and surveillance activities.
- (iv) An evaluation of the advantages of cooperative State and Federal management if all or part of the proposed sanctuary is within the territorial limits of any State or is superjacent to the subsoil and seabed within the seaward boundary of a State, as that boundary is established under the Submerged Lands Act (43 U.S.C. 1301 et seq.).
- (v) An estimate of the annual cost to the Federal Government of the proposed designation, including costs of personnel, equipment and facilities, enforcement, research, and public education.
- (vi) The proposed regulations referred to in paragraph (1)(A).
- (D) Maps depicting the boundaries of the proposed sanctuary.
- (E) The basis for the determinations made under section 303(a) with respect to the area.

- (F) An assessment of the considerations under section 303(b)(1).
- (3) Public Hearing.--No sooner than thirty days after issuing a notice under this subsection, the Secretary shall hold at least one public hearing in the coastal area or areas that will be most affected by the proposed designation of the area as a national marine sanctuary for the purpose of receiving the views of interested parties.
- (4) Terms of Designation.--The terms of designation of a sanctuary shall include the geographic area proposed to be included within the sanctuary, the characteristics of the area that give it conservation, recreational, ecological, historical, research, educational, or aesthetic value, and the types of activities that will be subject to regulation by the Secretary to protect those characteristics. The terms of designation may be modified only by the same procedures by which the original designation is made.
- (5) Fishing Regulations.--The Secretary shall provide the appropriate Regional Fishery Management Council with the opportunity to prepare regulations for fishing within the Exclusive Economic Zone as the Council may deem necessary to implement the proposed designation. regulations prepared by the Council, or a Council determination that regulations are not necessary pursuant to this paragraph, shall be accepted and issued as proposed regulations by the Secretary unless the Secretary finds that the Council's action fails to fulfill the purposes and policies of this title and the goals and objectives of the proposed designation. In preparing the regulations, a Regional Fishery Management Council shall use as guidance the national standards of section 301(a) of the Magnuson-Stevens Act (16 U.S.C. 1851) to the extent that the standards are consistent and compatible with the goals and objectives of the proposed designation. The Secretary shall prepare the fishing regulations, if the Council declines to make a determination with respect to the need for regulations, makes a determination which is rejected by the Secretary, or fails to prepare the regulations in a timely manner. Any amendments to the fishing regulations shall be ed, approved, and issued in the same manner as the original regulations. The Secretary shall also cooperate with other appropriate fishery management authorities with rights or responsibilities within a proposed sanctuary at the earliest practicable stage in ing any sanctuary fishing regulations.
- (6) Committee Action.--After receiving the documents under subsection (a)(l)(C), the Committee on Resources of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate may each hold hearings on the proposed designation and on the matters set forth in the documents. If within the forty-five day period of continuous session of Congress beginning on the date of submission of the documents, either Committee issues a report concerning matters addressed in the documents, the Secretary shall consider this report before publishing a notice to designate the national marine sanctuary.

(b) TAKING EFFECT OF DESIGNATIONS.--

(1) Notice.--In designating a national marine sanctuary, the Secretary shall publish in the Federal Register notice of the designation together with final regulations to implement the designation and any other matters required by law, and submit such notice to the Congress. The Secretary shall advise the public of the availability of the final management plan and the final environmental impact statement with respect to such sanctuary. The Secretary shall issue a

notice of designation with respect to a proposed national marine sanctuary site not later than 30 months after the date a notice declaring the site to be an active candidate for sanctuary designation is published in the Federal Register under regulations issued under this Act, or shall publish not later than such date in the Federal Register findings regarding why such notice has not been published. No notice of designation may occur until the expiration of the period for Committee action under subsection (a)(6). The designation (and any of its terms not disapproved under this subsection) and regulations shall take effect and become final after the close of a review period of forty-five days of continuous session of Congress beginning on the day on which such notice is published unless in the case of a natural [sic] marine sanctuary that is located partially or entirely within the seaward boundary of any State, the Governor affected certifies to the Secretary that the designation or any of its terms is unacceptable, in which case the designation or the unacceptable term shall not take effect in the area of the sanctuary lying within the seaward boundary of the State.

- (2) Withdrawal of Designation.-- If the Secretary considers that actions taken under paragraph (1) will affect the designation of a national marine sanctuary in a manner that the goals and objectives of the sanctuary or System cannot be fulfilled, the Secretary may withdraw the entire designation. If the Secretary does not withdraw the designation, only those terms of the designation or not certified under paragraph (1) shall take effect.
- (3) Procedures.-- In computing the forty-five-day periods of continuous session of Congress pursuant to subsection (a)(6) and paragraph (1) of this subsection--
- (A) continuity of session is broken only by an adjournment of Congress sine die; and
- (B) the days on which either House of Congress is not in session because of an adjournment of more than three days to a day certain are excluded.

(c) ACCESS AND VALID RIGHTS .--

- (1) Nothing in this title shall be construed as terminating or granting to the Secretary the right to terminate any valid lease, permit, license, or right of subsistence use or of access that is in existence on the date of designation of any national marine sanctuary.
- (2) The exercise of a lease, permit, license, or right is subject to regulation by the Secretary consistent with the purposes for which the sanctuary is designated.

(d) INTERAGENCY COOPERATION .--

- (1) Review of Agency Actions.--
- (A) In General.--Federal agency actions internal or external to a national marine sanctuary, including private activities authorized by licenses, leases, or permits, that are likely to destroy, cause the loss of, or injure any sanctuary resource are subject to consultation with the Secretary.
- (B) Agency Statements Required.-- Subject to any regulations the Secretary may establish each Federal agency proposing an action described in subparagraph (A) shall provide the Secretary with a written statement describing the action and its potential effects on sanctuary resources at

the earliest practicable time, but in no case later than 45 days before the final approval of the action unless such Federal agency and the Secretary agree to a different schedule.

- (2) Secretary's Recommended Alternatives.--If the Secretary finds that a Federal agency action is likely to destroy, cause the loss of, or injure a sanctuary resource, the Secretary shall (within 45 days of receipt of complete information on the proposed agency action) recommend reasonable and prudent alternatives, which may include conduct of the action elsewhere, which can be taken by the Federal agency in implementing the agency action that will protect sanctuary resources.
- (3) Response to Recommendations.--The agency head who receives the Secretary's recommended alternatives under paragraph (2) shall promptly consult with the Secretary on the alternatives. If the agency head decides not to follow the alternatives, the agency head shall provide the Secretary with a written statement explaining the reasons for that decision.
- (4) FAILURE TO FOLLOW ALTERNATIVE.--If the head of a Federal agency takes an action other than an alternative recommended by the Secretary and such action results in the destruction of, loss of, or injury to a sanctuary resource, the head of the agency shall promptly prevent and mitigate further damage and restore or replace the sanctuary resource in a manner approved by the Secretary.
- (e) REVIEW OF MANAGEMENT PLANS.--Not more than 5 years after the date of designation of any national marine sanctuary, and thereafter at intervals not exceeding 5 years, the Secretary shall evaluate the substantive progress toward implementing the management plan and goals for the sanctuary, especially the effectiveness of site-specific management techniques and strategies, and shall revise the management plan and regulations as necessary to fulfill the purposes and policies of this title. This review shall include a prioritization of management objectives.
- (f) LIMITATION ON DESIGNATION OF NEW SANCTUARIES.--
- (1) FINDING REQUIRED.--The Secretary may not publish in the Federal Register any sanctuary designation notice or regulations proposing to designate a new sanctuary, unless the Secretary has published a finding that--
- (A) the addition of a new sanctuary will not have a negative impact on the System; and
- (B) sufficient resources were available in the fiscal year in which the finding is made to-
- (i) effectively implement sanctuary management plans for each sanctuary in the System; and
- (ii) complete site characterization studies and inventory known sanctuary resources, including cultural resources, for each sanctuary in the System within 10 years after the date that the finding is made if the resources available for those activities are maintained at the same level for each fiscal year in that 10 year period.
- (2) DEADLINE.--If the Secretary does not submit the findings required by paragraph (1) before February 1, 2004, the Secretary shall submit to the Congress before October 1, 2004, a finding with respect to whether the requirements of subparagraphs (A) and (B) of paragraph 1 have been met by all existing sanctuaries.

- (3) LIMITATION ON APPLICATION.--Paragraph (1) does not apply to any sanctuary designation documents for--
- (A) a Thunder Bay National Marine Sanctuary; or
- (B) a Northwestern Hawaiian Islands National Marine Sanctuary.
- (g) NORTHWESTERN HAWAIIAN ISLANDS CORAL REEF RESERVE.--
- (1) PRESIDENTIAL DESIGNATION.--The President, after consultation with the Governor of the State of Hawaii, may designate any Northwestern Hawaiian Islands coral reef or coral reef ecosystem as a coral reef reserve to be managed by the Secretary of Commerce.
- (2) SECRETARIAL ACTION.--Upon the designation of a reserve under paragraph (1) by the President, the Secretary shall--
- (A) take action to initiate the designation of the reserve as a National Marine Sanctuary under sections 303 and 304 of the National Marine Sanctuaries Act (16 U.S.C. 1433);
- (B) establish a Northwestern Hawaiian Islands Reserve Advisory Council under section 315 of that Act (16 U.S.C. 1445a), the membership of which shall include at least 1 representative from Native Hawaiian groups; and
- (C) until the reserve is designated as a National Marine Sanctuary, manage the reserve in a manner consistent with the purposes and policies of that Act.
- (3) PUBLIC COMMENT.--Notwithstanding any other provision of law, no closure areas around the Northwestern Hawaiian Islands shall become permanent without adequate review and comment.
- (4) COORDINATION.--The Secretary shall work with other Federal agencies and the Director of the National Science Foundation, to develop a coordinated plan to make vessels and other resources available for conservation or research activities for the reserve.
- (5) REVIEW.--If the Secretary has not designated a national marine sanctuary in the Northwestern Hawaiian Islands under sections 303 and 304 of the National Marine Sanctuaries Act (16 U.S.C. 1433, 1434) before October 1, 2005, the Secretary shall conduct a review of the management of the reserve under section 304(e) of that Act (16 U.S.C. 1434(e)).
- (6) REPORT.--No later than 6 months after the date of enactment of this Act, the Secretary shall submit a report to the Senate Committee on Commerce, Science, and Transportation and the House of Representatives Committee on Resources, describing actions taken to implement this subsection, including costs of monitoring, enforcing, and addressing marine debris, and the extent to which the fiscal or other resources necessary to carry out this subsection are reflected in the Budget of the United States Government submitted by the President under section 1104 of title 31, United States Code.

(7) AUTHORIZATION OF APPROPRIATIONS.--There are authorized to be appropriated to the Secretary of Commerce to carry out the provisions of this subsection such sums, not exceeding \$4,000,000 for each of fiscal years 2001, 2002, 2003, 2004, and 2005, as are reported under paragraph (6) to be reflected in the Budget of the United States Government.

Sec. 305. APPLICATION OF REGULATIONS AND INTERNATIONAL NEGOTIATIONS

- (a) REGULATIONS.--This title and the regulations issued under section 304 shall be applied in accordance with generally recognized principles of international law, and in accordance with the treaties, conventions, and other agreements to which the United States is a party. No regulation shall apply to or be enforced against a person who is not a citizen, national, or resident alien of the United States, unless in accordance with--
- (1) generally recognized principles of international law;
- (2) an agreement between the United States and the foreign state of which the person is a citizen; or
- (3) an agreement between the United States and the flag state of a foreign vessel, if the person is a crewmember of the vessel.
- (b) NEGOTIATIONS.--The Secretary of State, in consultation with the Secretary, shall take appropriate action to enter into negotiations with other governments to make necessary arrangements for the protection of any national marine sanctuary and to promote the purposes for which the sanctuary is established.
- (c) INTERNATIONAL COOPERATION.--The Secretary, in consultation with the Secretary of State and other appropriate Federal agencies, shall cooperate with other governments and international organizations in the furtherance of the purposes and policies of this title and consistent with applicable regional and multilateral arrangements for the protection and management of special marine areas.

Sec. 306. PROHIBITED ACTIVITIES

It is unlawful for any person to--

- (1) destroy, cause the loss of, or injure any sanctuary resource managed under law or regulations for that sanctuary;
- (2) possess, sell, offer for sale, purchase, import, export, deliver, carry, transport, or ship by any means any sanctuary resource taken in violation of this section;
- (3) interfere with the enforcement of this title by--
- (A) refusing to permit any officer authorized to enforce this title to board a vessel, other than a vessel operated by the Department of Defense or United States Coast Guard, subject to such person's control for the purposes of conducting any search or inspection in connection with the enforcement of this title;

- (B) resisting, opposing, impeding, intimidating, harassing, bribing, interfering with, or forcibly assaulting any person authorized by the Secretary to implement this title or any such authorized officer in the conduct of any search or inspection performed under this title; or
- (C) knowingly and willfully submitting false information to the Secretary or any officer authorized to enforce this title in connection with any search or inspection conducted under this title; or
- (4) violate any provision of this title or any regulation or permit issued pursuant to this title.

Sec. 307. ENFORCEMENT

- (a) IN GENERAL.--The Secretary shall conduct such enforcement activities as are necessary and reasonable to carry out this title.
- (b) POWERS OF AUTHORIZED OFFICERS.--Any person who is authorized to enforce this title may--
- (1) board, search, inspect, and seize any vessel suspected of being used to violate this title or any regulation or permit issued under this title and any equipment, stores, and cargo of such vessel;
- (2) seize wherever found any sanctuary resource taken or retained in violation of this title or any regulation or permit issued under this title;
- (3) seize any evidence of a violation of this title or of any regulation or permit issued under this title;
- (4) execute any warrant or other process issued by any court of competent jurisdiction;
- (5) exercise any other lawful authority; and
- (6) arrest any person, if there is reasonable cause to believe that such a person has committed an act prohibited by section 306(3).
- (c) CRIMINAL OFFENSES.--
- (1) OFFENSES.--A person is guilty of an offense under this subsection if the person commits any act prohibited by section 306(3).
- (2) PUNISHMENT.--Any person that is guilty of an offense under this subsection-
- (A) except as provided in subparagraph (B), shall be fined under title 18, United States Code, imprisoned for not more than 6 months, or both; or
- (B) in the case of a person who in the commission of such an offense uses a dangerous weapon, engages in conduct that causes bodily injury to any person authorized to enforce this title or any person authorized to implement the provisions of this title, or places any such person in fear of

imminent bodily injury, shall be fined under title 18, United States Code, imprisoned for not more than 10 years, or both.

(d) CIVIL PENALTIES .--

- (1) Civil penalty.--Any person subject to the jurisdiction of the United States who violates this title or any regulation or permit issued under this title shall be liable to the United States for a civil penalty of not more than \$100,000 for each such violation, to be assessed by the Secretary. Each day of a continuing violation shall constitute a separate violation.
- (2) Notice.--No penalty shall be assessed under this subsection until after the person charged has been given notice and an opportunity for a hearing.
- (3) In Rem Jurisdiction.--A vessel used in violating this title or any regulation or permit issued under this title shall be liable in rem for any civil penalty assessed for such violation. Such penalty shall constitute a maritime lien on the vessel and may be recovered in an action in rem in the district court of the United States having jurisdiction over the vessel.
- (4) Review of Civil Penalty.--Any person against whom a civil penalty is assessed under this subsection may obtain review in the United States district court for the appropriate district by filing a complaint in such court not later than 30 days after the date of such order.
- (5) Collection of Penalties.--If any person fails to pay an assessment of a civil penalty under this section after it has become a final and unappealable order, or after the appropriate court has entered final judgment in favor of the Secretary, the Secretary shall refer the matter to the Attorney General, who shall recover the amount assessed in any appropriate district court of the United States. In such action, the validity and appropriateness of the final order imposing the civil penalty shall not be subject to review.
- (6) Compromise or Other Action by Secretary.--The Secretary may compromise, modify, or remit, with or without conditions, any civil penalty which is or may be imposed under this section.

(e) FORFEITURE.--

- (1) In General.--Any vessel (including the vessel's equipment, stores, and cargo) and other item used, and any sanctuary resource taken or retained, in any manner, in connection with or as a result of any violation of this title or of any regulation or permit issued under this title shall be subject to forfeiture to the United States pursuant to a civil proceeding under this subsection. The proceeds from forfeiture actions under this subsection shall constitute a separate recovery in addition to any amounts recovered as civil penalties under this section or as civil damages under section 312. None of those proceeds shall be subject to set-off.
- (2) Application of the Customs Laws.--The Secretary may exercise the authority of any United States official granted by any relevant customs law relating to the seizure, forfeiture, condemnation, disposition, remission, and mitigation of property in enforcing this title.

- (3) Disposal of Sanctuary Resources.--Any sanctuary resource seized pursuant to this title may be disposed of pursuant to an order of the appropriate court or, if perishable, in a manner prescribed by regulations promulgated by the Secretary. Any proceeds from the sale of such sanctuary resource shall for all purposes represent the sanctuary resource so disposed of in any subsequent legal proceedings.
- (4) Presumption.--For the purposes of this section there is a rebuttable presumption that all sanctuary resources found on board a vessel that is used or seized in connection with a violation of this title or of any regulation or permit issued under this title were taken or retained in violation of this title or of a regulation or permit issued under this title.
- (f) PAYMENT OF STORAGE, CARE, AND OTHER COSTS.--
- (1) Expenditures.--
- (A) Notwithstanding any other law, amounts received by the United States as civil penalties, forfeitures of property, and costs imposed under paragraph (2) shall be retained by the Secretary in the manner provided for in section 107(f)(1) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980.
- (B) Amounts received under this section for forfeitures and costs imposed under paragraph (2) shall be used to pay the reasonable and necessary costs incurred by the Secretary to provide temporary storage, care, maintenance, and disposal of any sanctuary resource or other property seized in connection with a violation of this title or any regulation or permit issued under this title.
- (C) Amounts received under this section as civil penalties and any amounts remaining after the operation of subparagraph (B) shall be used, in order of priority, to--
- (i) manage and improve the national marine sanctuary with respect to which the violation occurred that resulted in the penalty or forfeiture;
- (ii) pay a reward to any person who furnishes information leading to an assessment of a civil penalty, or to a forfeiture of property, for a violation of this title or any regulation or permit issued under this title; and
- (iii) manage and improve any other national marine sanctuary.
- (2) Liability for Costs.--Any person assessed a civil penalty for a violation of this title or of any regulation or permit issued under this title, and any claimant in a forfeiture action brought for such a violation, shall be liable for the reasonable costs incurred by the Secretary in storage, care, and maintenance of any sanctuary resource or other property seized in connection with the violation.
- (g) SUBPOENAS.--In the case of any hearing under this section which is determined on the record in accordance with the procedures provided for under section 554 of title 5, United States Code, the Secretary may issue subpoenas for the attendance and testimony of witnesses and the production of relevant papers, books, electronic files, and documents, and may administer oaths.

- (h) USE OF RESOURCES OF STATE AND OTHER FEDERAL AGENCIES.—The Secretary shall, whenever appropriate, use by agreement the personnel, services, and facilities of State and other Federal departments, agencies, and instrumentalities, on a reimbursable or nonreimbursable basis, to carry out the Secretary's responsibilities under this section.
- (i) COAST GUARD AUTHORITY NOT LIMITED.--Nothing in this section shall be considered to limit the authority of the Coast Guard to enforce this or any other Federal law under section 89 of title 14, United States Code.
- (j) INJUNCTIVE RELIEF.--If the Secretary determines that there is an imminent risk of destruction or loss of or injury to a sanctuary resource, or that there has been actual destruction or loss of, or injury to, a sanctuary resource which may give rise to liability under section 312, the Attorney General, upon request of the Secretary, shall seek to obtain such relief as may be necessary to abate such risk or actual destruction, loss, or injury, or to restore or replace the sanctuary resource, or both. The district courts of the United States shall have jurisdiction in such a case to order such relief as the public interest and the equities of the case may require.
- (k) AREA OF APPLICATION AND ENFORCEABILITY.--The area of application and enforceability of this title includes the territorial sea of the United States, as described in Presidential Proclamation 5928 of December 27, 1988, which is subject to the sovereignty of the United States, and the United States exclusive economic zone, consistent with international law.
- (l) NATIONWIDE SERVICE OF PROCESS.- In any action by the United States under this title, process may be served in any district where the defendant is found, resides, transacts business, or has appointed an agent for the service of process.

Sec. 308. REGULATIONS

The Secretary may issue such regulations as may be necessary to carry out this title.

Sec. 309. RESEARCH, MONITORING, AND EDUCATION

- (a) IN GENERAL- The Secretary shall conduct, support, or coordinate research, monitoring, evaluation, and education programs consistent with subsections (b) and (c) and the purposes and policies of this title.
- (b) RESEARCH AND MONITORING.-
- (1) IN GENERAL.- The Secretary may--
- (A) support, promote, and coordinate research on, and long-term monitoring of, sanctuary resources and natural processes that occur in national marine sanctuaries, including exploration, mapping, and environmental and socioeconomic assessment;
- (B) develop and test methods to enhance degraded habitats or restore damaged, injured, or lost sanctuary resources; and

- (C) support, promote, and coordinate research on, and the conservation, curation, and public display of, the cultural, archeological, and historical resources of national marine sanctuaries.
- (2) AVAILABILITY OF RESULTS.- The results of research and monitoring conducted, supported, or permitted by the Secretary under this subsection shall be made available to the public.

(c) EDUCATION-

- (1) IN GENERAL.- The Secretary may support, promote, and coordinate efforts to enhance public awareness, understanding, and appreciation of national marine sanctuaries and the System. Efforts supported, promoted, or coordinated under this subsection must emphasize the conservation goals and sustainable public uses of national marine sanctuaries and the System.
- (2) EDUCATIONAL ACTIVITIES.- Activities under this subsection may include education of the general public, teachers, students, national marine sanctuary users, and ocean and coastal resource managers.
- (d) INTERPRETIVE FACILITIES.-
- (1) IN GENERAL.- The Secretary may develop interpretive facilities near any national marine sanctuary.
- (2) FACILITY REQUIREMENT.- Any facility developed under this subsection must emphasize the conservation goals and sustainable public uses of national marine sanctuaries by providing the public with information about the conservation, recreational, ecological, historical, cultural, archeological, scientific, educational, or aesthetic qualities of the national marine sanctuary.
- (e) CONSULTATION AND COORDINATION.- In conducting, supporting, and coordinating research, monitoring, evaluation, and education programs under subsection (a) and developing interpretive facilities under subsection (d), the Secretary may consult or coordinate with Federal, interstate, or regional agencies, States or local governments.

Sec. 310. SPECIAL USE PERMITS

- (a) ISSUANCE OF PERMITS.--The Secretary may issue special use permits which authorize the conduct of specific activities in a national marine sanctuary if the Secretary determines such authorization is necessary--
- (1) to establish conditions of access to and use of any sanctuary resource; or
- (2) to promote public use and understanding of a sanctuary resource.
- (b) PUBLIC NOTICE REQUIRED.- The Secretary shall provide appropriate public notice before identifying any category of activity subject to a special use permit under subsection (a).
- (c) PERMIT TERMS.--A permit issued under this section--

- (1) shall authorize the conduct of an activity only if that activity is compatible with the purposes for which the sanctuary is designated and with protection of sanctuary resources;
- (2) shall not authorize the conduct of any activity for a period of more than 5 years unless renewed by the Secretary;
- (3) shall require that activities carried out under the permit be conducted in a manner that does not destroy, cause the loss of, or injure sanctuary resources; and
- (4) shall require the permittee to purchase and maintain comprehensive general liability insurance, or post an equivalent bond, against claims arising out of activities conducted under the permit and to agree to hold the United States harmless against such claims.
- (d) FEES.--
- (1) Assessment and Collection.--The Secretary may assess and collect fees for the conduct of any activity under a permit issued under this section.
- (2) Amount.--The amount of a fee under this subsection shall be equal to the sum of--
- (A) costs incurred, or expected to be incurred, by the Secretary in issuing the permit;
- (B) costs incurred, or expected to be incurred, by the Secretary as a direct result of the conduct of the activity for which the permit is issued, including costs of monitoring the conduct of the activity; and
- (C) an amount which represents the fair market value of the use of the sanctuary resource.
- (3) Use of Fees.--Amounts collected by the Secretary in the form of fees under this section may be used by the Secretary--
- (A) for issuing and administering permits under this section; and
- (B) for expenses of managing national marine sanctuaries.
- (4) WAIVER OR REDUCTION OF FEES.- The Secretary may accept in-kind contributions in lieu of a fee under paragraph (2)(C), or waive or reduce any fee assessed under this subsection for any activity that does not derive a profit from the access to or use of sanctuary resources.
- (e) VIOLATIONS.--Upon violation of a term or condition of a permit issued under this section, the Secretary may--
- (1) suspend or revoke the permit without compensation to the permittee and without liability to the United States;
- (2) assess a civil penalty in accordance with section 307; or
- (3) both.

- (f) REPORTS.--Each person issued a permit under this section shall submit an annual report to the Secretary not later than December 31 of each year which describes activities conducted under that permit and revenues derived from such activities during the year.
- (g) FISHING.--Nothing in this section shall be considered to require a person to obtain a permit under this section for the conduct of any fishing activities in a national marine sanctuary.

Sec. 311. COOPERATIVE AGREEMENTS, DONATIONS, AND ACQUISITIONS

- (a) AGREEMENTS AND GRANTS- The Secretary may enter into cooperative agreements, contracts, or other agreements with, or make grants to, States, local governments, regional agencies, interstate agencies, or other persons to carry out the purposes and policies of this title.
- (b) AUTHORIZATION TO SOLICIT DONATIONS.--The Secretary may enter into such agreements with any nonprofit organization authorizing the organization to solicit private donations to carry out the purposes and policies of this title.
- (c) DONATIONS.--The Secretary may accept donations of funds, property, and services for use in designating and administering national marine sanctuaries under this title. Donations accepted under this section shall be considered as a gift or bequest to or for the use of the United States.
- (d) ACQUISITIONS.--The Secretary may acquire by purchase, lease, or exchange, any land, facilities, or other property necessary and appropriate to carry out the purposes and policies of this title
- (e) USE OF RESOURCES OF OTHER GOVERNMENT AGENCIES.- The Secretary may, whenever appropriate, enter into an agreement with a State or other Federal agency to use the personnel, services, or facilities of such agency on a reimbursable or nonreimbursable basis, to assist in carrying out the purposes and policies of this title.
- (f) AUTHORITY TO OBTAIN GRANTS.- Notwithstanding any other provision of law that prohibits a Federal agency from receiving assistance, the Secretary may apply for, accept, and use grants from other Federal agencies, States, local governments, regional agencies, interstate agencies, foundations, or other persons, to carry out the purposes and policies of this title.

Sec. 312. DESTRUCTION OR LOSS OF, OR INJURY TO, SANCTUARY RESOURCES

(a) LIABILITY FOR INTEREST.--

- (1) Liability to UNITED STATES.--Any person who destroys, causes the loss of, or injures any sanctuary resource is liable to the United States for an amount equal to the sum of--
- (A) the amount of response costs and damages resulting from the destruction, loss, or injury; and
- (B) interests on that amount calculated in the manner described under section 1005 of the Oil Pollution Act of 1990.

- (2) Liability In Rem.--Any vessel used to destroy, cause the loss of, or injure any sanctuary resource shall be liable in rem to the United States for response costs and damages resulting from such destruction, loss, or injury. The amount of that liability shall constitute a maritime lien on the vessel and may be recovered in an action in rem in the district court of the United States having jurisdiction over the vessel.
- (3) Defenses.--A person is not liable under this subsection if that person establishes that--
- (A) the destruction or loss of, or injury to, the sanctuary resource was caused solely by an act of God, an act of war, or an act or omission of a third party, and the person acted with due care;
- (B) the destruction, loss, or injury was caused by an activity authorized by Federal or State law; or
- (C) the destruction, loss, or injury was negligible.
- (4) Limits to Liability.--Nothing in sections 4281-4289 of the Revised Statutes of the United States or section 3 of the Act of February 13, 1893, shall limit the liability of any person under this title.
- (b) RESPONSE ACTIONS AND DAMAGE ASSESSMENT.--
- (1) Response Actions.--The Secretary may undertake or authorize all necessary actions to prevent or minimize the destruction or loss of, or injury to, sanctuary resources, or to minimize the imminent risk of such destruction, loss, or injury.
- (2) Damage Assessment.--The Secretary shall assess damages to sanctuary resources in accordance with section 302(6).
- (c) CIVIL ACTIONS FOR RESPONSE COSTS AND DAMAGES.--
- (1) The Attorney General, upon request of the Secretary, may commence a civil action against any person or vessel who may be liable under subsection (a) for response costs and damages. The Secretary, acting as trustee for sanctuary resources for the United States, shall submit a request for such an action to the Attorney General whenever a person may be liable for such costs or damages.
- (2) An action under this subsection may be brought in the United States district court for any district in which--
- (A) the defendant is located, resides, or is doing business, in the case of an action against a person;
- (B) the vessel is located, in the case of an action against a vessel; or
- (C) the destruction of, loss of, or injury to a sanctuary resource occurred.

- (d) USE OF RECOVERED AMOUNTS.--Response costs and damages recovered by the Secretary under this section shall be retained by the Secretary in the manner provided for in section 107(f)(1) of the Comprehensive Environmental Response, Compensation and Liability Act (42 U.S.C. 9607(f)(1)), and used as follows:
- (1) RESPONSE COSTS.--Amounts recovered by the United States for costs of response actions and damage assessments under this section shall be used, as the Secretary considers appropriate-
- (A) to reimburse the Secretary or any other Federal or State agency that conducted those activities; and
- (B) after reimbursement of such costs, to restore, replace, or acquire the equivalent of any sanctuary resource.
- (2) OTHER AMOUNTS.--All other amounts recovered shall be used, in order of priority--
- (A) to restore, replace, or acquire the equivalent of the sanctuary resources that were the subject of the action, including for costs of monitoring and the costs of curation and conservation of archeological, historical, and cultural sanctuary resources;
- (B) to restore degraded sanctuary resources of the national marine sanctuary that was the subject of the action, giving priority to sanctuary resources and habitats that are comparable to the sanctuary resources that were the subject of the action; and
- (C) to restore degraded sanctuary resources of other national marine sanctuaries.
- (3) Federal-State Coordination.--Amounts recovered under this section with respect to sanctuary resources lying within the jurisdiction of a State shall be used under paragraphs (2)(A) and (B) in accordance with the court decree or settlement agreement and an agreement entered into by the Secretary and the Governor of that State.
- (e) STATUTE OF LIMITATIONS.--An action for response costs or damages under subsection (c) shall be barred unless the complaint is filed within 3 years after the date on which the Secretary completes a damage assessment and restoration plan for the sanctuary resources to which the action relates.

SEC. 313. AUTHORIZATION OF APPROPRIATIONS

There are authorized to be appropriated to the Secretary--

- (1) to carry out this title--
- (A) \$32,000,000 for fiscal year 2001;
- (B) \$34,000,000 for fiscal year 2002;
- (C) \$36,000,000 for fiscal year 2003;

- (D) \$38,000,000 for fiscal year 2004;
- (E) \$40,000,000 for fiscal year 2005; and
- (2) for construction projects at national marine sanctuaries, \$6,000,000 for each of fiscal years 2001, 2002, 2003, 2004, and 2005.

Sec. 314. U.S.S. MONITOR ARTIFACTS AND MATERIALS

- (a) CONGRESSIONAL POLICY.--In recognition of the historical significance of the wreck of the United States ship Monitor to coastal North Carolina and to the area off the coast of North Carolina known as the Graveyard of the Atlantic, the Congress directs that a suitable display of artifacts and materials from the United States ship Monitor be maintained permanently at an appropriate site in coastal North Carolina. [P.L. 102-587 authorized a grant for the acquisition of space in Hatteras Village, NC, for display of artifacts and administration and operations of the Monitor National Marine Sanctuary.
- (b) DISCLAIMER.--This section shall not affect the following:
- (1) Responsibilities Of Secretary.--The responsibilities of the Secretary to provide for the protection, conservation, and display of artifacts and materials from the United States ship Monitor.
- (2) Authority Of Secretary.--The authority of the Secretary to designate the Mariner's Museum, located at Newport News, Virginia, as the principal museum for coordination of activities referred to in paragraph (1).

Sec. 315. ADVISORY COUNCILS

- (a) ESTABLISHMENT.--The Secretary may establish one or more advisory councils (in this section referred to as an 'Advisory Council') to advise and make recommendations to the Secretary regarding the designation and management of national marine sanctuaries. The Advisory Councils shall be exempt from the Federal Advisory Committee Act.
- (b) MEMBERSHIP.--Members of the Advisory Councils may be appointed from among--
- (1) persons employed by Federal or State agencies with expertise in management of natural resources;
- (2) members of relevant Regional Fishery Management Councils established under section 302 of the Magnuson-Stevens Act; and
- (3) representatives of local user groups, conservation and other public interest organizations, scientific organizations, educational organizations, or others interested in the protection and multiple use management of sanctuary resources.

- (c) LIMITS ON MEMBERSHIP.--For sanctuaries designated after the date of enactment of the National Marine Sanctuaries Program Amendments Act of 1992, the membership of Advisory Councils shall be limited to no more than 15 members.
- (d) STAFFING AND ASSISTANCE.--The Secretary may make available to an Advisory Council any staff, information, administrative services, or assistance the Secretary determines are reasonably required to enable the Advisory Council to carry out its functions.
- (e) PUBLIC PARTICIPATION AND PROCEDURAL MATTERS.--The following guidelines apply with respect to the conduct of business meetings of an Advisory Council:
- (1) Each meeting shall be open to the public, and interested persons shall be permitted to present oral or written statements on items on the agenda.
- (2) Emergency meetings may be held at the call of the chairman or presiding officer.
- (3) Timely notice of each meeting, including the time, place, and agenda of the meeting, shall be published locally and in the Federal Register, except that in the case of a meeting of an Advisory Council established to provide assistance regarding any individual national marine sanctuary the notice is not required to be published in the Federal Register.
- (4) Minutes of each meeting shall be kept and contain a summary of the attendees and matters discussed.

Sec. 316. ENHANCING SUPPORT FOR NATIONAL MARINE SANCTUARIES

- (a) AUTHORITY.--The Secretary may establish a program consisting of--
- (1) the creation, adoption, and publication in the Federal Register by the Secretary of a symbol for the national marine sanctuary program, or for individual national marine sanctuaries or the System;
- (2) the solicitation of persons to be designated as official sponsors of the national marine sanctuary program or of individual national marine sanctuaries;
- (3) the designation of persons by the Secretary as official sponsors of the national marine sanctuary program or of individual sanctuaries;
- (4) the authorization by the Secretary of the manufacture, reproduction, or other use of any symbol published under paragraph (1), including the sale of items bearing such a symbol, by official sponsors of the national marine sanctuary program or of individual national marine sanctuaries;
- (5) the creation, marketing, and selling of products to promote the national marine sanctuary program, and entering into exclusive or nonexclusive agreements authorizing entities to create, market or sell on the Secretary's behalf;

- (6) the solicitation and collection by the Secretary of monetary or in-kind contributions from official sponsors for the manufacture, reproduction or use of the symbols published under paragraph (1);
- (7) the retention of any monetary or in-kind contributions collected under paragraphs (5) and (6) by the Secretary; and
- (8) the expenditure and use of any monetary and in-kind contributions, without appropriation, by the Secretary to designate and manage national marine sanctuaries.

Monetary and in-kind contributions raised through the sale, marketing, or use of symbols and products related to an individual national marine sanctuary shall be used to support that sanctuary.

- (b) CONTRACT AUTHORITY.--The Secretary may contract with any person for the creation of symbols or the solicitation of official sponsors under subsection (a).
- (c) RESTRICTIONS.--The Secretary may restrict the use of the symbols published under subsection (a), and the designation of official sponsors of the national marine sanctuary program or of individual national marine sanctuaries to ensure compatibility with the goals of the national marine sanctuary program.
- (d) PROPERTY OF UNITED STATES.-- Any symbol which is adopted by the Secretary and published in the Federal Register under subsection (a) is deemed to be the property of the United States.
- (e) PROHIBITED ACTIVITIES.--It is unlawful for any person--
- (1) designated as an official sponsor to influence or seek to influence any decision by the Secretary or any other Federal official related to the designation or management of a national marine sanctuary, except to the extent that a person who is not so designated may do so;
- (2) to represent himself or herself to be an official sponsor absent a designation by the Secretary;
- (3) to manufacture, reproduce, or otherwise use any symbol adopted by the Secretary under subsection (a)(1), including to sell any item bearing such a symbol, unless authorized by the Secretary under subsection (a)(4) or subsection (f); or
- (4) to violate any regulation promulgated by the Secretary under this section.
- (f) COLLABORATIONS.--The Secretary may authorize the use of a symbol adopted by the Secretary under subsection (a)(1) by any person engaged in a collaborative effort with the Secretary to carry out the purposes and policies of this title and to benefit a national marine sanctuary or the System.
- (g) AUTHORIZATION FOR NON-PROFIT PARTNER ORGANIZATION TO SOLICIT SPONSORS.--

- (1) IN GENERAL.--The Secretary may enter into an agreement with a non-profit partner organization authorizing it to assist in the administration of the sponsorship program established under this section. Under an agreement entered into under this paragraph, the Secretary may authorize the non-profit partner organization to solicit persons to be official sponsors of the national marine sanctuary system or of individual national marine sanctuaries, upon such terms as the Secretary deems reasonable and will contribute to the successful administration of the sanctuary system. The Secretary may also authorize the non-profit partner organization to collect the statutory contribution from the sponsor, and, subject to paragraph (2), transfer the contribution to the Secretary.
- (2) REIMBURSEMENT FOR ADMINISTRATIVE COSTS.--Under the agreement entered into under paragraph (1), the Secretary may authorize the non-profit partner organization to retain not more than 5 percent of the amount of monetary contributions it receives from official sponsors under the agreement to offset the administrative costs of the organization in soliciting sponsors.
- (3) PARTNER ORGANIZATION DEFINED.--In this subsection, the term 'partner organization' means an organization that--
- (A) draws its membership from individuals, private organizations, corporation, academic institutions, or State and local governments; and
- (B) is established to promote the understanding of, education relating to, and the conservation of the resources of a particular sanctuary or 2 or more related sanctuaries.

Sec. 318. DR. NANCY FOSTER SCHOLARSHIP PROGRAM

- (a) ESTABLISHMENT.--The Secretary shall establish and administer through the National Ocean Service the Dr. Nancy Foster Scholarship Program. Under the program, the Secretary shall award graduate education scholarships in oceanography, marine biology or maritime archeology, to be known as Dr. Nancy Foster Scholarships.
- (b) PURPOSES.--The purposes of the Dr. Nancy Foster Scholarship Program are--
- (1) to recognize outstanding scholarship in oceanography, marine biology, or maritime archeology, particularly by women and members of minority groups; and
- (2) to encourage independent graduate level research in oceanography, marine biology, or maritime archeology.
- (c) AWARD.--Each Dr. Nancy Foster Scholarship--
- (1) shall be used to support graduate studies in oceanography, marine biology, or maritime archeology at a graduate level institution of higher education; and
- (2) shall be awarded in accordance with guidelines issued by the Secretary.
- (d) DISTRIBUTION OF FUNDS.--The amount of each Dr. Nancy Foster Scholarship shall be provided directly to a recipient selected by the Secretary upon receipt of certification that the

recipient will adhere to a specific and detailed plan of study and research approved by a graduate level institution of higher education.

- (e) FUNDING.--Of the amount available each fiscal year to carry out this title, the Secretary shall award 1 percent as Dr. Nancy Foster Scholarships.
- (f) SCHOLARSHIP REPAYMENT REQUIREMENT.--The Secretary shall require an individual receiving a scholarship under this section to repay the full amount of the scholarship to the Secretary if the Secretary determines that the individual, in obtaining or using the scholarship, engaged in fraudulent conduct or failed to comply with any term or condition of the scholarship.
- (g) MARITIME ARCHEOLOGY DEFINED.--In this section the term `maritime archeology' includes the curation, preservation, and display of maritime artifacts.

Appendix IIIE: Species List

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The following lists of vertebrate species occurring in Cordell Bank National Marine Sanctuary (CBNMS) have been compiled from species lists created for Gulf of the Farallones National Marine Sanctuary (GFNMS). In addition to common and scientific names of each specific taxon, the lists include information or data on federal listed status, estimated population size, population trend, seasonal and geographical distribution, longevity, and age of first breeding. A "Habitat Importance" designation is also given which reflects the importance of the sanctuary to that particular species. This designation is based on (1) the abundance of the species within the sanctuary, (2) the proportion of the overall range or population that occurs in the sanctuary, and (3) the importance of the sanctuary to breeding individuals.

Taxonomic classification, phylogenetic order, and all other information are according to references used for each class of vertebrates listed below. Each class has slightly differing criteria for acceptance to the list. For mammals the list includes all marine species, including vagrants that have been recorded within sanctuary waters. For birds the list includes all marine species, including vagrants that have been recorded in sanctuary waters. For reptiles and fish the lists include those species recorded in the sanctuary plus others suspected of occurring based on records both north and south of the sanctuary, but for which no definite records are currently known. Species just suspected of occurring in sanctuary waters are marked with a "?" in the GC column (see abbreviation codes below).

The headings of the vertebrate lists include the following categories:

GC – Which sanctuary has the species been recorded

- B Both Gulf of the Farallones and Cordell Bank NMS
- ? Suspected of occurring based on range but lacking documented records

COMMON NAME - The common (English) name of the species.

SCIENTIFIC NAME - The scientific (Latin) name of the species.

FS – The Federal listed status as of January 2004 (as found at //ecos.fws.gov/webpage/webpage _vip_listed.html). These designations are given if any population or subspecies occurring in the sanctuary is so listed.

E – Endangered T – Threatened

SC – Species of Concern: may be endangered or threatened; not enough information has been gathered to support listing at this time.

C – Candidate: to become a proposed species for listing as endangered or threatened.

D – Delisted; to be monitored for 5 years.

POPEST – The estimated population size in a given location (LOCA, see below). When numbers are given they represent 1000's of individuals. When no population estimates are available the terms "Common," "Uncommon," and "Rare" are used as general indicators of the worldwide population size.

LOCA - The geographic location (area) for which the population estimate applies, as follows:

World - World

N.Am - North America

Pacific — Pacific Ocean or Pacific North American Coast

Calif – California

HI – The "Habitat Importance" of the NMS to the species (see introduction). Codes are as follows:

E – Extremely Important

V – Very Important

S – Somewhat Important

No designation indicates the NMS is of little importance.

VERTEBRATES

Birds					
COMMON NAME	SCIENTIFIC NAME	FED STATUS	POP. ESTIMATE	LOCATION OF POP EST	НІ
Red-throated Loon	Gavia stellata		25	N.Am	V
Pacific Loon	Gavia pacifica		50	World	Е
Common Loon	Gavia immer	SC	500	N.Am	V
Red-necked Grebe	Podiceps grisegena		45	N.Am	V
Laysan Albatross	Phoebastria immutabilis		2600	World	S
Black-footed Albatross	Phoebastria nigripes		200	World	Е
Short-tailed Albatross	Phoebastria albatrus	Е	1	World	S

Birds					
		FED	POP.	LOCATION	
COMMON NAME	SCIENTIFIC NAME	STATUS	ESTIMATE	OF POP EST	HI
Northern Fulmar	Fulmarus glacialis		1400	Pacif	Е
Murphy's Petrel	Pterodroma ultima		Uncommon		S
Mottled Petrel	Pterodroma inexpectata		Uncommon		S
Dark-rumped Petrel	Pterodroma phaeopygia	Е	70	World	
Pink-footed Shearwater	Puffinus creatopus		Common		Е
Flesh-footed					
Shearwater	Puffinus carneipes		Uncommon		V
Buller's Shearwater	Puffinus bulleri		Uncommon		Е
Sooty Shearwater	Puffinus griseus		Common		Е
Short-tailed Shearwater	Puffinus tenuirostris		Common		Е
Manx Shearwater	Puffinus puffinus		1000	World	
Black-vented					
Shearwater	Puffinus opisthomelas		30	World	V
Wilson's Storm-Petrel	Oceanites oceanicus		Common		
Fork-tailed Storm-					
Petrel	Oceanodroma furcata		1	Calif	V
Leach's Storm-Petrel	Oceanodroma leucorhoa		20	Calif	V
Ashy Storm-Petrel	Oceanodroma homochroa	SC	7.5	Calif	Е
Black Storm-Petrel	Oceanodroma melania		Uncommon		
Brown Pelican	Pelecanus occidentalis	Е	150	Pacif	Е
Brandt's Cormorant	Phalacrocorax penicillatus		125	Calif	Е
Double-crested					
Cormorant	Phalacrocorax auritus		10	Calif	V
Pelagic Cormorant	Phalacrocorax pelagicus		25	Calif	Е
Magnificent Frigatebird	Fregata magnificens		Common		
Brant	Branta bernicla		50	Pacif	Е
Surf Scoter	Melanitta perspicillata		536	Pacif	Е
Red-necked Phalarope	Phalaropus lobatus		2500	N.Am	Е
Red Phalarope	Phalaropus fulicaria		1000	N.Am	Е
South Polar Skua	Catharacta maccormicki		Uncommon		V
Pomarine Jaeger	Stercorarius pomarinus		Common		Е
Parasitic Jaeger	Stercorarius parasiticus		Common		Е
Long-tailed Jaeger	Stercorarius longicaudus		250	World	V
Bonaparte's Gull	Larus philadelphia		Uncommon		V
Heermann's Gull	Larus heermanni		1500	World	Е
Mew Gull	Larus canus		Uncommon		Е
California Gull	Larus californicus		Common		Е
Herring Gull	Larus argentatus		500	N.Am	V
Thayer's Gull	Larus thayeri		Uncommon		V
Western Gull	Larus occidentalis		60	Calif	Е
Glaucous-winged Gull	Larus glaucescens		200	N.Am	Е
Glaucous Gull	Larus hyperboreus		Uncommon		S
Sabine's Gull	Xema sabini		Uncommon		V
Black-legged Kittiwake	Rissa tridactyla		2600	Pacif	V

Birds					
		FED	POP.	LOCATION	
COMMON NAME	SCIENTIFIC NAME	STATUS	ESTIMATE	OF POP EST	HI
Caspian Tern	Sterna caspia		35	N.Am	Е
Elegant Tern	Sterna elegans		29	World	Е
Common Tern	Sterna hirundo		100	N.Am	V
Arctic Tern	Sterna paradisaea		Common		V
Forster's Tern	Sterna forsteri		400	World	Е
Common Murre	Uria aalge		800	Calif	Е
Pigeon Guillemot	Cepphus columba		30	Calif	Е
Marbled Murrelet	Brachyramphus marmoratus	T	6.5	Calif	Е
	Synthliboramphus				
Xantus's Murrelet	hypoleucus	SC	8	World	S
Craveri's Murrelet	Synthliboramphus craveri		Rare		S
Ancient Murrelet	Synthliboramphus antiquus		1200	World	V
Cassin's Auklet	Ptychoramphus aleuticus	SC	75	Calif	Е
Parakeet Auklet	Aethia psittacula		3000	World	
Rhinoceros Auklet	Cerorhinca monocerata		5	Calif	Е
Horned Puffin	Fratercula corniculata		Common		S
Tufted Puffin	Fratercula cirrhata		0.7	Calif	Е

Mammals					
COMMON NAME	SCIENTIFIC NAME	FEDERAL STATUS	POPEST	LOCA	НІ
Blue Whale	Balaenoptera musculus	E	2	Pacif	Е
Fin Whale	Balaenoptera physalus	E	1.2	C,O,W	S
Sei Whale	Balaenoptera borealis	Е	rare	Pacif	S
Minke Whale	Balaenoptera acutorostrata		0.6	Calif	V
Humpback Whale	Megaptera novaeangliae	Е	6	Pacif	Е
Gray Whale	Eschrichtius robustus	D	26	World	V
Northern Right Whale	Eubalaena glacialis	Е	Rare	Pacif	S
Harbor Porpoise	Phocoena phocoena		16.7	Cent- No. Ca	Е
Dall's Porpoise	Phocoenoides dalli		117.5	C,O,W	Е
Pacific White-sided Dolphin	Lagenorhynchus obliquidens		25.8	C,O,W	Е
Northern Right Whale Dolphin	Lissodelphis borealis		13.7	C,O,W	Е
Long-beaked Common	Dalphinus agnonsis		Common	$C \cap W$	S
Dolphin Striped Dolphin	Delphinus capensis Stenella coeruleoalba		20.2	C,O,W C,O,W	3
Risso's Dolphin	Grampus griseus		16.5	C,O,W	V

Mammals					
		FEDERAL			
COMMON NAME	SCIENTIFIC NAME	STATUS	POPEST	LOCA	HI
Killer Whale	Orcinus orca		1	C,O,W	V
	Globicephala				
Short-finned Pilot Whale	macrorhynchus		60	World	
Sperm Whale	Physeter macrocephalus	Е	1800	World	S
Pigmy Sperm Whale	Kogia breviceps		Uncommon		S
Dwarf Sperm Whale	Kogia simus		Rare		S
Cuvier's Beaked Whale	Ziphius cavirostris		Uncommon		V
Baird's Beaked Whale	Berardius bairdii		Rare		V
Hubb's Beaked Whale	Mesoplodon calrhubbsi		Rare		S
Blainsville's Beaked Whale	Mesoplodon densirostris		Rare		S
Steller Sea Lion	Eumetopius jubatus	T	0.4	Calif	Е
California Sea Lion	Zalophus califorianus		214	C,O,W	V
Northern Fur Seal	Callorhinus ursinus		4.3	Calif	V
Northern Elephant Seal	Mirounga angustirostris		84	Calif	Е
Harbor Seal	Phoca vitulina		28	Calif	Е

	Fish					
GC	COMMON NAME	SCIENTIFIC NAME	FED STATU S	POPEST	LOCA	НІ
С	Black Hagfish	Eptatretus deani				
?	Western River Lamprey	Lampetra ayersii		Uncommon	Pacif	
С	Lamprey unid.	Petromyzontidae		Common	Pacif	
?	Prickly Shark	Echinorhinus cookei		Uncommon	Pacif	
?	Broad skate	Amblyraja badia				
?	Diamond Stingray	Dasyatis dipterura		Common	Pacif	
?	Round Stingray	Urolophus halleri		Common	Pacif	
?	Pacific Snake Eel	Ophichthus triserialis		Rare	Pacif	
?	Yellow Snake Eel	Ophichthus zaphochir		Rare	Pacif	
В	Pacific Herring	Clupea pallasii		Common	Pacif	Е
В	Pacific Argentine	Argentina sialis		Uncommon	Pacif	Е
?	Popeye Blacksmelt	Lipolagus ochotensis		Uncommon	Pacif	
?	Robust Blacksmelt	Pseudobathylagus milleri		Uncommon	Pacif	Е
В	Surf Smelt	Hypomesus pretiosus		Common	Pacif	Е
С	Eulachon	Thaleichthys pacificus		Common	Pacif	
?	Pink Salmon	Oncorhynchus gorbuscha		Uncommon	Pacif	
?	Sockeye Salmon	Oncorhynchus nerka		Rare	Pacif	
В	Chinook Salmon	Oncorhynchus tshawytscha	E & T regional	Common	Pacif	Е
?	Spurred Hatchetfish	Argyropelecus hemigymnus		Uncommon	Pacif	
?	Silvery Hatchetfish	Argyropelecus sladeni		Uncommon	Pacif	V

	Fish					
			FED			
			STATU			
GC	COMMON NAME	SCIENTIFIC NAME	S	POPEST	LOCA	HI
?	Highfin Dragonfish	Bathophilus flemingi		Uncommon	Pacif	
С	Longfin Dragonfish	Tactostoma macropus		Uncommon	Pacif	Е
?	California Lizardfish	Synodus lucioceps		Uncommon	Pacif	S
?	Slender Barricudina	Lestidium ringens		Uncommon	Pacif	Е
?	California Flashlightfish	Protomyctophum crockeri		Uncommon	Pacif	V
С	California Grenadier	Nezumia stelgidolepis		Uncommon	Pacif	Е
?	Finescale Codling	Antimora microlepis		Uncommon	Pacif	Е
?	Crested Bigscale	Poromitra crassiceps		Uncommon	Pacif	
?	Longjaw Bigscale	Scopeloberyx robustus				
?	Twospine Bigscale	Scopelogadus mizolepis		Uncommon	Pacif	V
?	Oxeye oreo	Allocyttus folletti				
F?	Tubesnout	Aulorhynchus flavidus		Uncommon	Pacif	
?	Threespine Stickleback	Gasterosteus aculeatus		Common	Pacif	Е
?	Bay Pipefish	Syngnathus leptorynchus		Common	Pacif	V
C	Rougheye Rockfish	Sebastes aleutianus				
C	Gopher Rockfish	Sebastes carnatus		Common	Pacif	
В	Greenspotted Rockfish	Sebastes chlorostictus		Common	Pacif	
?	Calico Rockfish	Sebastes dallii		Common	Pacif	V
C	Greenstriped Rockfish	Sebastes elongates		Common	Pacif	
C	Tiger Rockfish	Sebastes nigrocinctus				
?	Chameleon Rockfish	Sebastes phillipsi				
C	Greenblotched Rockfish	Sebastes rosenblatti		Common	Pacif	
C	Sablefish	Anoplopoma fimbria		Common	Pacif	Е
?	Shortspine Combfish	Zaniolepis frenata		Uncommon	Pacif	V
?	Saddleback Sculpin	Oligocottus rimensis		Common	Pacif	V
	Northern Spearnose					
?	Poacher	Agonopsis vulsa		Uncommon	Pacif	V
С	Blackfin Poacher	Bathyagonus nigripinnis		Rare	Pacif	
?	Warty Poacher	Chesnonia verrucosa		Common	Pacif	V
?	Tubenose Poacher	Pallasina barbata				
С	Smootheye Poacher	Xeneretmus leiops		Rare	Pacif	
?	White Suckerfish	Remora albescens		Rare	Pacif	
?	Remora	Remora remora		Uncommon	Pacif	V
?	Señorita	Oxyjulis californica		Common	Pacif	S
С	Snakehead Eelpout	Embryx crotalinus	1	Rare	Pacif	
?	Blackmouth Eelpout	Lycodapus fierasfer		Rare	Pacif	
?	Pallid Eelpout	Lycodapus mandibularis		Rare	Pacif	Е
C	Bigfin Eelpout	Lycodes cortezianus		Common	Pacif	Е
C	Black Eelpout	Lycodes diapterus		Common	Pacif	Е
?	Sixspot Prickleback	Kasatkia seigeli				
?	Pacific Sand Lance	Ammodytes hexapterus		Common	Pacif	V
?	Ragfish	Icosteus aenigmaticus		Uncommon	Pacif	V

	Fish					
			FED			
			STATU			
GC	COMMON NAME	SCIENTIFIC NAME	S	POPEST	LOCA	HI
С	Lingcod	Ophidon elongates		Common	Pacif	
?	Louvar	Luvarus imperialis		Uncommon	Pacif	V
С	Pacific Chub Mackerel	Scomber japonicus		Common	Pacif	Е
С	Pacific Pompano	Peprilus simillimus		Common	Pacif	Е
С	Jack Mackerel	Trachurus symmetricus		Common	Pacif	
?	Roughscale Sole	Clidoderma asperrimum				
С	Flathead Sole	Hippoglossoides elassodon				
C	Southern Rock Sole	Lepidopsetta bilineata		Common	Pacif	
?	Oceanic Pufferfish	Lagocephalus lagocephalus		Rare	Pacif	V
F	Pacific Hagfish	Eptatretus stoutii		Common	Pacif	V
В	Pacific Lamprey	Lampreta tridentata	SC	Common	Pacif	Е
В	Spotted Ratfish	Hydrolagus colliei		Common	Pacif	Е
В	Bluntnose Sixgill Shark	Hexanchus griseus		Common	Pacif	Е
	Broadnose Sevengill					
?	Shark	Notorynchus cepedianus		Common	Pacif	V
В	Spiny Dogfish	Squalus acanthias		Common	Pacif	Е
?	Pacific Sleeper Shark	Somniosus pacificus		Uncommon	Pacif	V
?	White Shark	Carcharodon carcharias		Uncommon	Pacif	Е
В	Shortfin Mako	Isurus oxyrinchus		Uncommon	Pacif	V
В	Salmon Shark	Lamna ditropis		Uncommon	Pacif	Е
C	Brown Catshark	Apristurus brunneus		Uncommon	Pacif	Е
C	Longnose Catshark	Apristurus kampae		Rare	Pacif	Е
C	Filetail Catshark	Parmaturus xaniurus		Uncommon	Pacif	Е
В	Brown Smoothhound	Mustelus henlei		Common	Pacif	Е
В	Pacific Electric Ray	Torpedo californica		Common	Pacif	Е
C	Deepsea Skate	Bathyraja abyssicola		Rare	Pacif	Е
C	Sandpaper Skate	Bathyraja interrupta		Rare	Pacif	Е
?	White Skate	Bathyraja spinosissima		Rare	Pacif	V
C	Black Skate	Bathyraja trachura		Uncommon	Pacif	Е
В	Big Skate	Raja binoculata		Common	Pacif	Е
В	California Skate	Raja inornata		Uncommon	Pacif	Е
В	Longnose Skate	Raja rhina		Common	Pacif	Е
C	Starry Skate	Raja stellulata		Uncommon	Pacif	Е
?	Green Sturgeon	Acipenser medirostris	T	Common	Pacif	S
?	White Sturgeon	Acipenser transmontanus	Е	Common	Pacif	S
?	Bonefish	Albula vulpes		Uncommon	Pacif	
?	Slender Snipe Eel	Nemichthys scolopaceus		Uncommon	Pacif	V
?	Sawtooth Snipe Eel	Serrivomer sector		Rare	Pacif	Е
В	Northern Anchovy	Engraulis mordax		Common	Pacif	Е
В	American Shad	Alosa sapidissima		Common	Pacif	Е
В	Pacific Sardine	Sardinops sagax		Common	Pacif	Е

	Fish					
			FED			
00	COMMONANT	GOVEN TEXTS OF A VALUE	STATU	DODEGE	1001	***
GC	COMMON NAME	SCIENTIFIC NAME	S	POPEST	LOCA	HI
?	California Smoothtongue	Leuroglossus stilbius		Common	Pacif	Е
?	Pacific Barreleye	Macropinna microstoma		Uncommon	Pacif	-
C	California Slickhead	Alepocephalus tenebrosus		Uncommon	Pacif	Е
C	Threadfin Slickhead	Talismania bifurcata		Rare	Pacif	Е
C	Whitebait Smelt	Allosmerus elongatus		Uncommon	Pacif	Е
?	Night Smelt	Spirinchus starksi	0.0	Common	Pacif	V
?	Longfin Smelt	Spirinchus thaleichthys	SC	Common	Pacif	V
?	Chum Salmon	Oncorhynchus keta	Т	Uncommon	Pacif	
ъ	Coho Salmon [Silver		T		D .C	_
В	Salmon]	Oncorhynchus kisutch	T	Common	Pacif	Е
_ p	Rainbow Trout	0	E & T	Commission	David	г
В	[Steelhead]	Oncorhynchus mykiss	regional	Common	Pacif	Е
?	Bigeye Lightfish	Daphnos oculatus		Uncommon	Pacif	* 7
?	Silver Hatchetfish	Argyropelecus lychnus		Uncommon	Pacif	V
?	Dollar Hatchetfishes	Sternoptyx spp.		Uncommon	Pacif	
C	Pacific Viperfish	Chauliodus macouni		Uncommon	Pacif	Е
?	Daggertooth	Anotopterus pharao		Uncommon	Pacif	
?	Longnose Lancetfish	Alepisaurus ferox		Uncommon	Pacif	
		Symbolophorus			D : C	
C	California Lanternfish	californiensis			Pacif	
?	Blue Lanternfish	Tarletonbaenia crenularis		Uncommon	Pacif	Е
C	California Headlightfish	Diaphus theta			Pacif	
?	Northern Lampfish	Stenobrachius leucopsaurus		Uncommon	Pacif	V
?	Mexican Lampfish	Triphoturus mexicanus		Uncommon	Pacif	S
В	Spotted Cusk Eel	Chilara taylori		Common	Pacif	Е
?	Red Brotula	Brosmophycis marginata		Common	Pacif	V
С	Giant Grenadier	Albatrossia pectoralis		Rare	Pacif	Е
C	Shoulderspot Grenadier	Coelorinchus scaphopsis		Rare	Pacif	Е
С	Pacific Grenadier	Coryphaenoides acrolepis		Uncommon	Pacif	Е
?	Hundred-Fathom Codling	Physiculus rastrelliger		Uncommon	Pacif	
В	Pacific Hake	Merluccius productus		Common	Pacif	Е
?	Pacific Cod	Gadus microcephalus		Uncommon	Pacif	V
С	Pacific Tomcod	Microgadus proximus		Common	Pacif	Е
?	Walleye Pollock	Theragra chalcogramma		Rare	Pacif	V
В	Plainfin Midshipman	Porichthys notatus		Common	Pacif	Е
G	California Grunion	Leuresthes tenuis		Common	Pacif	S
С	Pacific saury	Cololabis saira		Common	Pacif	
?	Highsnout Bigscale	Melamphaes lugubris		Rare	Pacif	Е
С	Fangtooth	Anoplogaster cornuta		Rare	Pacif	Е
?	Snubnose Pipefish	Cosmocampus arctus		Uncommon	Pacif	V
С	Shiner Perch	Cymatogaster aggregate		Common	Pacif	
С	Pacific Ocean Perch	Sebastes alutus		Common	Pacif	Е
С	Brown Rockfish	Sebastes auriculatus		Common	Pacif	Е

	Fish					
			FED			
			STATU			
GC	COMMON NAME	SCIENTIFIC NAME	S	POPEST	LOCA	HI
С	Aurora Rockfish	Sebastes aurora		Common	Pacif	Е
В	Redbanded Rockfish	Sebastes babcocki		Common	Pacif	Е
?	Silvergray Rockfish	Sebastes brevispinis		Rare	Pacif	V
В	Copper Rockfish	Sebastes caurinus		Common	Pacif	Е
	Black-and-Yellow					
?	Rockfish	Sebastes chrysomelas		Common	Pacif	V
В	Starry Rockfish	Sebastes constellatus		Common	Pacif	Е
В	Darkblotched Rockfish	Sebastes crameri		Uncommon	Pacif	Е
В	Splitnose Rockfish	Sebastes diploproa		Common	Pacif	Е
В	Greenstriped Rockfish	Sebastes elongatus		Common	Pacif	Е
В	Swordspine Rockfish	Sebastes ensifer		Uncommon	Pacif	V
В	Widow Rockfish	Sebastes entomelas		Common	Pacif	Е
С	Pink Rockfish	Sebastes eos		Common	Pacif	Е
В	Yellowtail rockfish	Sebastes flavidus				
В	Chilipepper	Sebastes goodei		Common	Pacif	Е
С	Rosethorn Rockfish	Sebastes helvomaculatus		Uncommon	Pacif	
В	Shortbelly Rockfish	Sebastes jordani		Common	Pacif	Е
В	Cowcod	Sebastes levis		Common	Pacif	Е
В	Quillback Rockfish	Sebastes maliger		Uncommon	Pacif	Е
C	Blackgill Rockfish	Sebastes melanostomus		Common	Pacif	Е
В	Vermilion Rockfish	Sebastes miniatus		Common	Pacif	Е
В	Blue Rockfish	Sebastes mystinus		Common	Pacif	Е
В	Speckled Rockfish	Sebastes ovalis		Common	Pacif	Е
В	Bocaccio	Sebastes paucispinis		Common	Pacif	Е
В	Canary Rockfish	Sebastes pinniger		Common	Pacif	Е
В	Redstripe Rockfish	Sebastes proriger		Uncommon	Pacif	Е
G	Grass Rockfish	Sebastes rastrelliger		Common	Pacif	V
В	Rosy Rockfish	Sebastes rosaceus		Common	Pacif	V
В	Greenblotched Rockfish	Sebastes rosenblatti		Common	Pacif	Е
В	Yelloweye Rockfish	Sebastes ruberrimus		Common	Pacif	Е
В	Flag Rockfish	Sebastes rubrivinctus		Common	Pacif	Е
В	Bank Rockfish	Sebastes rufus		Common	Pacif	Е
В	Stripetail Rockfish	Sebastes saxicola		Common	Pacif	Е
В	Halfbanded Rockfish	Sebastes semicinctus		Common	Pacif	Е
В	Olive Rockfish	Sebastes serranoides		Common	Pacif	Е
?	Treefish	Sebastes serriceps		Common	Pacif	V
В	Pygmy Rockfish	Sebastes wilsoni		Rare	Pacif	Е
В	Sharpchin Rockfish	Sebastes zacentrus		Uncommon	Pacif	Е
С	Shortspine Thornyhead	Sebastolobus alascanus		Common	Pacif	
В	Longspine Thornyhead	Sebastolobus altivelis		Uncommon	Pacif	Е
В	Skilfish	Erilepis zonifer		Rare	Pacif	
В	Kelp Greenling	Hexagrammos		Common	Pacif	Е

	Fish					
			FED			
			STATU			
GC	COMMON NAME	SCIENTIFIC NAME	S	POPEST	LOCA	HI
		decagrammus				
В	Painted Greenling	Oxylebius pictus		Common	Pacif	Е
В	Longspine Combfish	Zaniolepis latipinnis		Uncommon	Pacif	Е
?	Rosylip Sculpin	Ascelichthys rhodorus		Uncommon	Pacif	V
?	Roughback Sculpin	Chitonotus pugetensis		Uncommon	Pacif	Е
?	Buffalo Sculpin	Enophrys bison		Common	Pacif	V
?	Dusky Sculpin	Icelinus burchami		Rare	Pacif	V
C	Threadfin Sculpin	Icelinus filamentosus		Uncommon	Pacif	Е
?	Frogmouth Sculpin	Icelinus oculatus		Rare	Pacif	V
	Spotfin Sculpin	Icelinus tenuis		Uncommon	Pacif	V
В	Longfin Sculpin	Jordania zonope		Uncommon	Pacif	V
В	Staghorn Sculpin	Leptocottus armatus		Common	Pacif	V
?	Silverspotted Sculpin	Belpsias cirrhosus		Uncommon	Pacif	V
?	Sailfin Sculpin	Nautichthys oculofasciatus		Uncommon	Pacif	V
C	Slim Sculpin	Radulinus asprellus		Uncommon	Pacif	
C	Sturgeon Poacher	Agonus acipenserinus		Common	Pacif	
?	Pygmy Poacher	Odontopyxis trispinosa		Common	Pacif	Е
?	Pricklebreast Poacher	Stellerina xyosterna		Uncommon	Pacif	V
C	Blackedge Poacher	Xeneretmus latifrons		Uncommon	Pacif	Е
?	Bluespotted Poacher	Xeneretmus triacanthus		Common	Pacif	V
C	Blacktail Snailfish	Careproctus melanurus		Uncommon	Pacif	Е
	Humpback Snailfish	Elassodiscus caudatus				
?	Tidepool Snailfish	Liparis florae		Common	Pacif	V
?	Slipskin Snailfish	Liparis fuscensis		Uncommon	Pacif	V
?	SouthernRingtail Snailfish	Liparis adiastolus		Uncommon	Pacif	V
?	Showy Snailfish	Lipris pulchellus		Uncommon	Pacif	V
?	Whalesucker	Remora australis		Rare	Pacif	
?	Veilfin	Caristius macropus		Rare	Pacif	
В	White Croaker	Genyonemus lineatus		Common	Pacif	Е
?	Queenfish	Seriphus politus		Common	Pacif	V
?	Opaleye	Girella nigricans		Common	Pacif	V
G	Shiner Perch	Cymatogaster aggregata		Common	Pacif	Е
G	Walleye Surfperch	Hyperprosopon argenteum		Common	Pacif	V
G	Rainbow Seaperch	Hypsurus caryi		Common	Pacif	V
G	Rubberlip Seaperch	Rhacochilus toxotes		Common	Pacif	V
В	Pink Seaperch	Zalembius rosaceus		Uncommon	Pacif	Е
?	Northern Ronquil	Ronquilus jordani		Rare	Pacif	V
?	Soft Eelpout	Bothrocara molle		Uncommon	Pacif	
?	Flatcheek Eelpout	Embryx crotalina		Rare	Pacif	
С	Blackbelly Eelpout	Lycodopsis pacifica		Common	Pacif	Е
?	Bearded Eelpout	Lyconema barbatus		Uncommon	Pacif	
C	Twoline Eelpout	Bothrocara brunneum		Common	Pacif	

	Fish					
			FED			
			STATU			
GC	COMMON NAME	SCIENTIFIC NAME	S	POPEST	LOCA	HI
?	Midwater Eelpout	Melanostigma pammelas		Uncommon	Pacif	Е
В	Monkeyface Prickleback	Cebidichthys violaceus		Common	Pacif	V
?	Bluebarred Prickleback	Plectrobranchus evides		Uncommon	Pacif	V
?	Whitebarred Prickleback	Poroclinus rothrocki		Uncommon	Pacif	V
?	Penpoint Gunnel	Apodichthys flavidus		Common	Pacif	V
В	Wolf-Eel	Anarrhichthys ocellatus		Common	Pacif	Е
?	Onespot Fringehead	Neoclinus uniornatus		Uncommon	Pacif	S
В	Blackeye Goby	Coryphopterus nicholsii		Common	Pacif	V
?	Pacific Barracuda	Sphyraena argentea		Common	Pacif	V
?	Escolar	Lepidocybrium flavobrunneur	n	Rare	Pacif	
?	Skipjack Tuna	Katsuwonus pelamis		Common	Pacif	V
?	Pacific Bonito	Sarda chiliensis		Common	Pacif	V
?	Bigeye Tuna	Thunnus obesus		Rare	Pacif	
В	Swordfish	Xiphias gladius		Common	Pacif	
C	Medusafish	Icichthys lockingtoni		Common	Pacif	Е
?	Smalleye Squaretail	Tetrogonurus cuvieri		Rare	Pacif	
В	Pacific Sanddab	Citharichthys sordidus		Common	Pacif	Е
В	Speckled Sanddab	Citharichthys stigmaeus		Common	Pacif	Е
В	California Halibut	Paralichthys californicus		Common	Pacif	Е
C	Pacific Halibut	Hippoglossus stenolepis		Uncommon	Pacif	
В	Arrowtooth Flounder	Atheresthes stomias		Uncommon	Pacif	Е
C	Deepsea Sole	Embassichthys bathybius		Uncommon	Pacif	Е
В	Petrale Sole	Eopsetta jordani		Common	Pacif	Е
В	Rex Sole	Glyptocephalus zachirus		Common	Pacif	Е
В	Butter Sole	Isopsetta isolepis		Common	Pacif	Е
FF						
F	Rock Sole	Lepidopsetta bilineata		Common	Pacif	Е
В	Slender Sole	Lyopsetta exilis		Uncommon	Pacif	Е
C	Sand Sole	Psettichthys melanostictus		Common	Pacif	
В	Dover Sole	Microstomus pacificus		Common	Pacif	Е
C	English Sole	Parophrys vetulus		Common	Pacif Pacif	V
В	Starry Flounder	Platichthys stellatus		Common	Pacif	Е
?	C-O Sole	Pleuronichthys coenosus		Common	Pacif	V
В	Curlfin Sole	Pleuronichthys decurrens		Common	Pacif	Е
В	Diamond Turbot	Pleuronichthys guttulatus		Common	Pacif	V
В	Hornyhead Turbot	Pleuronichthys verticalis		Common	Pacif	Е
		Reinhardtius				
?	Greenland Halibut	hippoglossoides		Uncommon	Pacif	V
	California Tonguefish	Symphurus atricauda		Common	Pacif	V
	Finescale Triggerfish	Balistes polylepis		Rare	Pacif	
В	Ocean Sunfish	Mola mola		Common	Pacif	Е

	Reptiles					
GC	COMMON NAME	SCIENTIFIC NAME	FEDERAL STATUS	POPEST	LOCA	HI
?	Loggerhead Turtle	Caretta caretta	T	Uncommon	World	
В	Leatherback Turtle	Dermochelys coriacea	Е	Rare	World	Е

Y		
Invertebrates		
CLASSIFICATION & COMMON NAME	SCIENTIFIC NAME	SOURCE
Monera		
Bacterial Mat	Beggiotoa spp.	
Porifera		~
white sponge	Stelletta clarella	Cordell Expeditions (CE)
Gray moon sponge	Spheciospongia confoederata	CE
aggregate vase sponge	Polymastia pachymastia	CE
Red volcano sponge	Acarnus erithacus	CE
	Lissodendoryx firma	CE
bread crumb sponge	Halichondria panicea	CE
	Geodia mesotriaena	CE
foliose sponge		Pirtle/Delta
	Guitarra abbotti	Lee
Cnidaria		
Yellow hydroid	Garveia annulata	CE
California hydrocoral	Stylaster californicus	CE
Red gorgonian coral	Swiftia sp.	Pirtle/Delta
Sea pen	Ptilosarcus sp.	Pirtle/Delta
Strawberry anemone	Corynactis californica	CE
White plumed anemone	Metridium giganteum	CE
white anemone	Metridium senile	CE
fish eating anemone	Urticina piscivora	Delta
Yellow zoanthid	Epizoanthus scotinus	CE
Orange cup coral	Balanophyllia elegans	CE
Solitary cup coral	Caryophyllia sp.	CE
clear anemone	Caryophyllidae	
dog toy	Anthomastus ritteri	
Annelids		
polychaete worm	Ophioneries annulata	CE
polychaete worm	Neries eakini	CE
Mollusca		
giant pacific octopus	Octopus dofleini	Delta
sea hare	Lipomena	
red octopus	Octopus rubescens	
jumbo squid	Dosidicus gigas	Delta
Triton shell	Fusitriton orgonensis	CE
blue ring top snail	Calliostoma annulatum	CE
top snail	Calliostoma ligatum	CE
	Pedicularia californica	CE
	Homalopoma luridum	CE
Dorid nudibranch	Anisodoris nobilis	CE

Invertebrates		
CLASSIFICATION & COMMON NAME	SCIENTIFIC NAME	SOURCE
nudibranch	Armina cordellensis	Gosliner
nudibranch	Aeolidia farallonensis	Gosliner
lined chiton	Tonicella lineata	CE
Arthropoda		
barnacle	Balanus nubilus	CE
barnacle	Megabalanus californicus	CE
spider crab	Scyra acutifrons	CE
masking crab	Loxorhynchus crispatus	CE
box crab	Lopholithodes foraminatus	
shrimp/ prawn	Pandalus spp.	
spot prawn	Pandalas platyceros	Delta
rock crab	Cancer sp.	Delta
Dungeness crab	Cancer magister	Delta
Echinoderm		
sea star	Crossaster papposus	
sun star	Rathbunaster californicus	
sun star	Solaster sp.	
spiny star	Poraniopsis inflata	
sunflower star	Pycnopodia sp.	
rainbow star	Orthasterias spp.	
leather star	Dermasterias imbricata	CE
basketstar	Gorgonocephalus eucinemis	
brittlestar	Ophiacantha sp.	
red star	Mediaster aequalis	CE
blood star	Henricia sp.	
sea star	Pteraster militaris	
sunflower star	Pycnopodia helianthoides	
cushion star	Pteraster tesselatus	
sand star	Luidia foliota	1
bat star	Asterina miniata	
sea cucumber	Parastichopus spp.	
sea cucumber	Psolus spp.	CE
sea cucumber	Parastichopus californicus	CE
sea cucumber sea cucumber	Parastichopus johnsoni Parastichopus leukothele	1
cookie cutter star	Ceramaster patagonicus	
brittlestar	Asteronyx sp.	
UTITUESTAL	Strongylocentrotus	CE
red sea urchin	franciscanus	
sea urchin	Allocentrotus fragilis	Delta
common crinoid	Florometra serratissima	Delta
Tunicates	1 tot officer a seri attisstitu	Dona
Lobed tunicate	Cystodytes lobatus	CE
Loose tumente	Cysionyies ioonius	CE